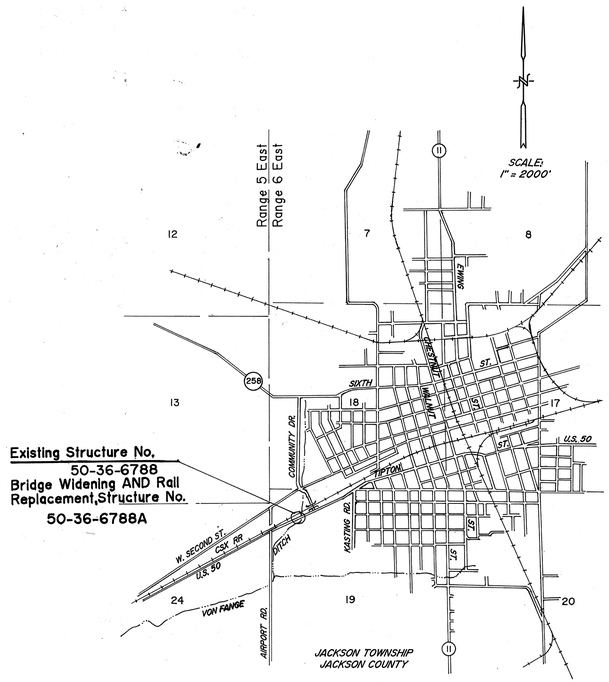

CONTRACT NO. R-24065

R-24065 part 2 of 2

INDIANA DEPARTMENT OF TRANSPORTATION

BRIDGE PLANS

FOR SPANS OVER 20 FEET ON U.S. 50

PROJECT NO. ST-9936 (C) P.E.
( ) R/W
NH-042-8 (007) CONST

BRIDGES OVER 20' SPAN					
FEDERAL REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936 (C)	1999	1	27

INDEX

PROJECT	STRUCTURE	TYPE	SPAN	OVER	STATION
ST-042-8(C)	50-36-6788A	CONTINUOUS REINFORCED CONCRETE SLAB	THREE SPAN 26'-3",31'-6",26'-3" 45°-00' SKEW, RT.	VonFange Ditch	

SHEET NO	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL
1		Title Sheet	
2		Typical Section	
3-4		Maintenance of Traffic - Bridge	
5-6		Maintenance of Traffic - Road	
7		Plan & Profile	
8-9		Road Details	
10		General Plan	
11		Bent Details	
12-13		Superstructure Details	
14		Bridge Rail Details	
15		R.C. Approach Slab	
16		Bridge Rail End Treatment	
17		Bridge Summary	

Bridge widening and replacement of bridge railing on Structure 50-36- 6788 located in the city of Seymour, Section 18, T6N, R6E, Jackson County, Indiana.

Bridge Length : 0.016 Mile
Roadway Length : 0.069 Mile
Total Length : 0.085 Mile
Max. Grade : 0%

INDEX CONTINUED
STANDARD DRAWINGS

SHEET NO.	SHEET DESIGNATION	SUBJECT	F.H.W.A. APPROVAL	ADOPTED "A" REVISION "R"
	BRIDGE STD. BR1	ALUMINUM BRIDGE RAILING		
	BRIDGE STD. BR2	ALUMINUM BRIDGE RAILING DETAILS		
	BRIDGE STD. BR3	STEEL BRIDGE RAILING		
	BRIDGE STD. BR4	STEEL BRIDGE RAILING DETAILS		
	BRIDGE STD. BR5	RAILING CONNECTION DETAILS		
	BRIDGE STD.			
18	BRIDGE STD. C1	MISCELLANEOUS DETAILS		
	BRIDGE STD. C2	MISCELLANEOUS DETAILS		
19	BRIDGE STD. C3	MISCELLANEOUS DETAILS		
	BRIDGE STD. C4	MISCELLANEOUS DETAILS		
	BRIDGE STD. D	CASTING DETAILS ROADWAY DRAINS		
	BRIDGE STD. D1	ADJUSTING FRAME DETAILS FOR ROADWAY DRAINS		
	BRIDGE STD.			
	BRIDGE STD. PB	PRESTRESSED CONCRETE TYPE I-BEAMS		
	BRIDGE STD. PB	PRESTRESSED CONCRETE TYPE I-BEAMS		
	BRIDGE STD. PB6	PRESTRESSED BOX BEAMS		
	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
	BRIDGE STD. PB	PRESTRESSED COMPOSITE BOX BEAMS WIDE		
	BRIDGE STD. PB10	TOLERANCES FOR FABRICATION OF PRESTRESSED BEAMS		
	BRIDGE STD. PB11	ELASTOMERIC BEARING PAD DETAILS		
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD. R2A	BRIDGE LIGHTING DETAILS		
	BRIDGE STD. R2B	BRIDGE LIGHTING DETAILS		
20	BRIDGE STD. S1	MISCELLANEOUS DETAILS		
	BRIDGE STD. SH1	STEEL SHOE DETAILS		
	BRIDGE STD. T SHEET A	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD. T SHEET B	STANDARD TEMPORARY BRIDGE		
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	BRIDGE STD.			
	ROAD STD. SHEET A	STANDARD PAVEMENT JOINTS		
	ROAD STD. SHEET B	STANDARD PAVEMENT JOINTS		
	ROAD STD. SHEET MA	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MC	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MD	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MD1	MISCELLANEOUS STANDARDS		
21	ROAD STD. SHEET ME	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MH	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MN	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET MP	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
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	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET	MISCELLANEOUS STANDARDS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR	GUARD RAIL CLASS		
	ROAD STD. SHEET GR5	ALUMINUM GUARD RAIL DETAILS		
	ROAD STD. SHEET GR6	STEEL TUBE GUARD RAIL DETAILS		
	ROAD STD. SHEET GR7	GUARD RAIL PIER CONNECTION DETAILS		
	ROAD STD. SHEET GR8	STEEL BEAM GUARD RAIL		
	ROAD STD. SHEET GR9	ALUMINUM BEAM GUARD RAIL		
	ROAD STD. SHEET GR10	GUARD RAIL BURIED ENDS		
	ROAD STD. SHEET GR10A	GUARD RAIL BREAKAWAY CABLE TERM.		
	ROAD STD.			
22	ROAD STD. SHEET CB2	TEMPORARY CONCRETE BARRIER		
	ROAD STD. SHEET 1 DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1A DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 1B DETOURS	STANDARD DETOUR SIGNS		
23	ROAD STD. SHEET 2 DETOURS	STANDARD DETOUR SIGNS		
24	ROAD STD. SHEET 2A DETOURS	STANDARD DETOUR SIGNS		
25	ROAD STD. SHEET 3 DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 3A DETOURS	STANDARD DETOUR SIGNS		
26	ROAD STD. SHEET 4 DETOURS	STANDARD DETOUR SIGNS		
27	ROAD STD. SHEET 5 DETOURS	STANDARD DETOUR SIGNS		
	ROAD STD. SHEET 5A DETOURS	STANDARD DETOUR SIGNS		

ESAL - 8,500,000

TRAFFIC DATA		
A.D.T. (1987)		14720 V.P.D.
A.D.T. (2014 PROJECTED)		21760 V.P.D.
D.H.V. (2014 PROJECTED)		1520 V.P.D.
TRUCKS		D.H.V. 7 % A.D.T. 9%
DESIGN SPEED		45 M.P.H.
ACCESS CONTROL	NONE	
FUNCTIONAL CLASSIFICATION	CONNECTING LINK OF RURAL PRINCIPAL ARTERIALS	
TERRAIN	LEVEL	

PLANS PREPARED BY

SIECO, Inc.
629 Washington Street
Columbus, IN 47201
(812) 372-9911

D. Eric Brunn

D. ERIC BRUNN No. 870259

Kloeker Engineering, P.C.
111 N. Poplar St.
P.O. Box 1022
Seymour, IN 47274-1022
812/523-3195

Delmar L. Kloeker

DELMAR L. KLOEKER No. 11844

APPROVED FOR LETTING

Phelps H. Klika 2/8/99
Chief, Division of Design

REVISIONS	
DATE	SHEET NO.

REVISIONS	
DATE	SHEET NO.

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

APPROVED:-

DIVISION ADMINISTRATOR DATE

INDIANA DEPARTMENT OF HIGHWAYS
STANDARD SPECIFICATIONS DATED 1995
TO BE USED WITH THESE PLANS.

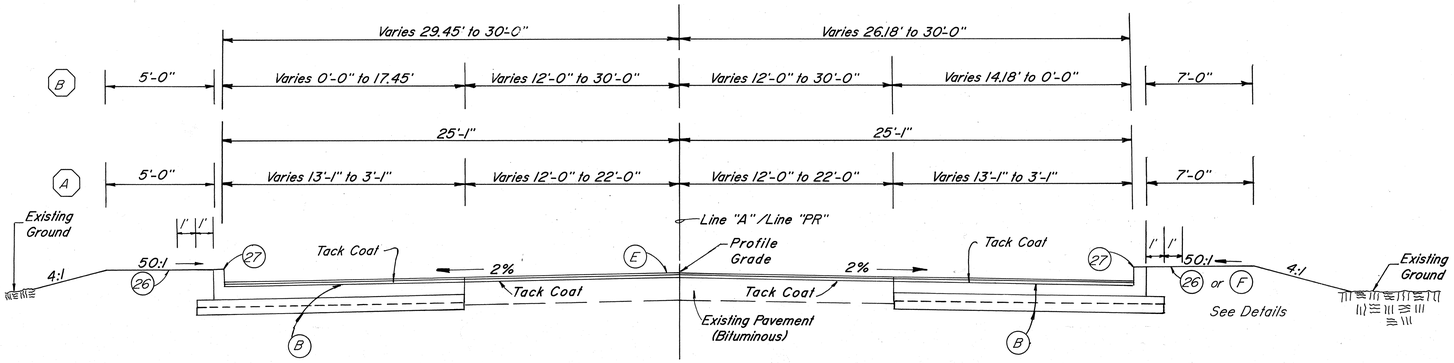
BRIDGE FILE:- 50-36-6788A

SF-22427

DES. NO. 9023646

TP100

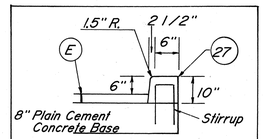
FEDERAL ROAD DIVISION NO.	STATE	PROJ. NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	2	27



TYPICAL SECTION

Line "A"

STA. 478+80 to STA. 485+34 (A) (West of Bridge)
STA. 487+12.75 to STA. 492+52 (B) (East of Bridge)
See Bridge Plans STA. 485+34 to 487+12.75



Integral Concrete Curb Modified
DETAIL
N.T.S.

NOTES:

1. 1" to be milled from all existing bituminous surfaces.
2. Wedge and Level as required for 2% Cross Slope from Sta. 483+00 to Sta. 491+75 (except for bridge and bridge approach slabs).
3. Subbase for Cement Concrete Pavement shall consist of 4" of 100% crushed coarse aggregate size #8 on 6" Compacted Aggregate Base Type "O", size #53.

LEGEND

(B) 8" Plain Jointed Cement Concrete Base over Subbase for Cement Concrete Pavement

(E) 75 kg/m2 (137.5#/Syd.) HMA Surface 9.5 mm, Mainline over 165 kg/m2 (302.5#/Syd.) HMA Intermediate 19.0 mm, Mainline

(F) 4" Concrete Sidewalk

(26) Sod (Nursery)

(27) Integral Concrete Curb, Modified

U.S. 50 (W. TIPTON ST.)

INDIANA DEPARTMENT OF TRANSPORTATION

TYPICAL CROSS SECTIONS

SCALE:- 1/4" = 1' - 0"

RECOMMENDED FOR APPROVAL

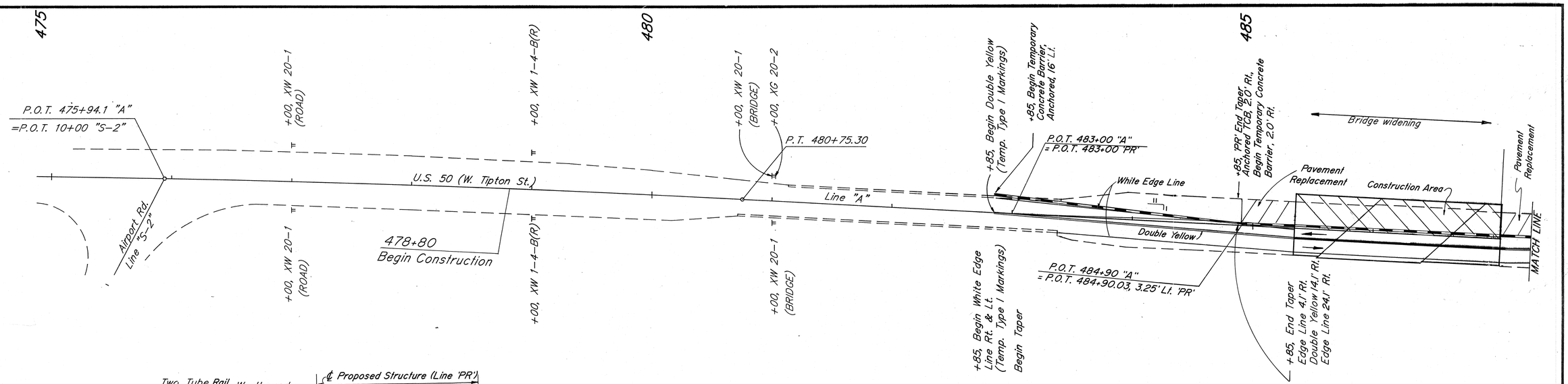
R. 24065

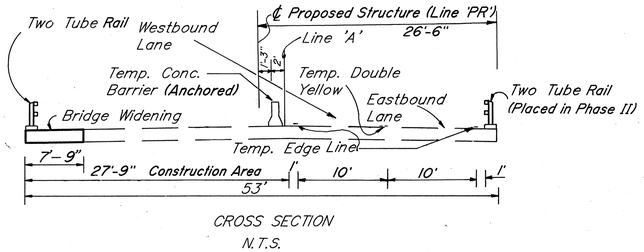
DELMAR L. KLEEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

1-11-99

SP-22397

TP110





CROSS SECTION
N.T.S.

LEGEND

- Drums
- Type III-B Barricade
- Construction Sign

NOTES

1 — Work to be accomplished in this phase includes:
A— Removal of existing rail on North side of bridge
B— Widening bridge to North
C— Reconstruction of approach slabs with integral curbs on North (Left) side
D— Installing new rail on North side of bridge
E— Placement of bridge overlay on North side of bridge

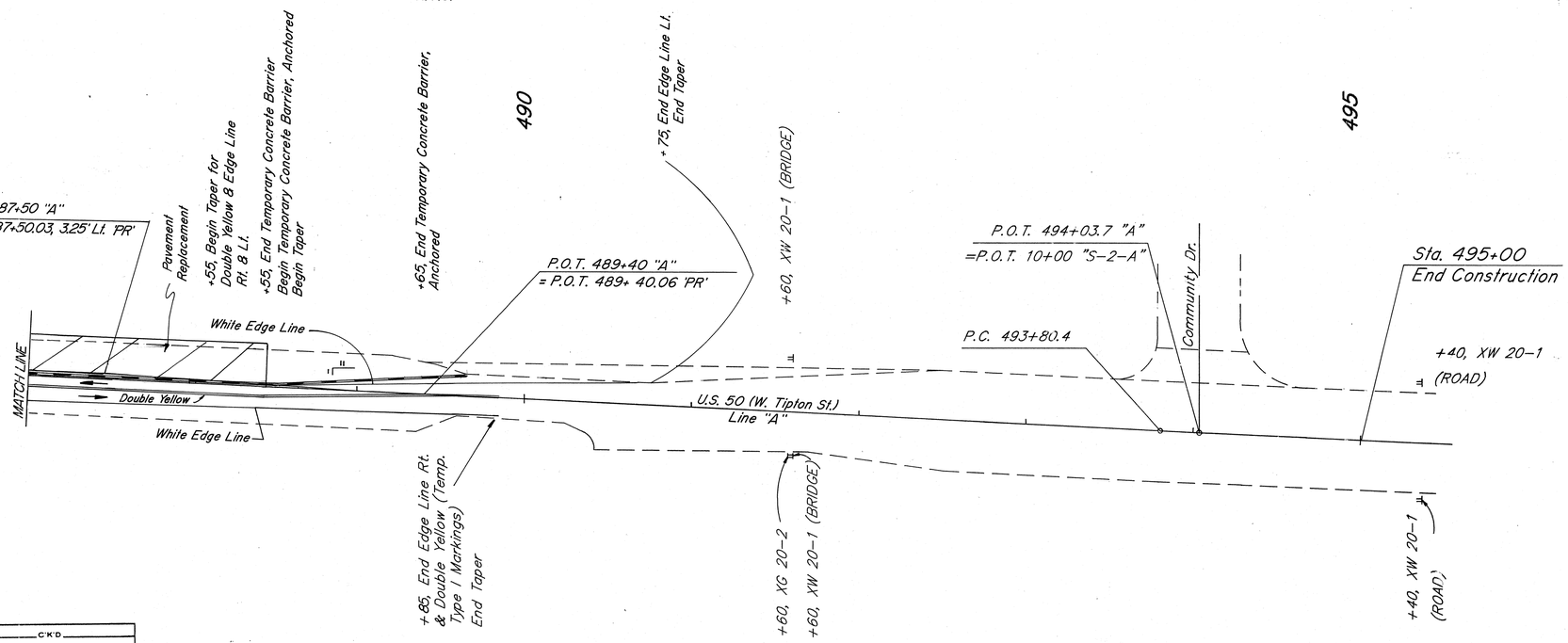
2 — Temporary Pavement to consist of 990#/Syd. HMA Base C 25 mm. See Road Plans for Maintenance of Traffic.

3 — Temporary Edge Line Lt. and Rt. shall closely parallel Double Yellow

4 — See Phase II Sheet for Estimated Quantities for Maintenance of Traffic for Bridge Widening

5 — Existing pavement markings to be removed between Sta. 483+00 and Sta. 489+55

6 — Bridge Maintenance of Traffic shall be coordinated with roadway construction. See Special Provisions.



PHASE I

TRAFFIC MAINTENANCE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

FOR BRIDGE WIDENING

SCALE:— 1" = 40' DATE:- 11-30 1998

SENIOR DESIGNER

DRAWING:- 1 OF 2 SHEET:- 3 OF 27

PROJECT:- ST-9936( ) STATION:—

BRIDGE CONTRACT NO. R-24065

BRIDGE FILE:- 50-36-6788A

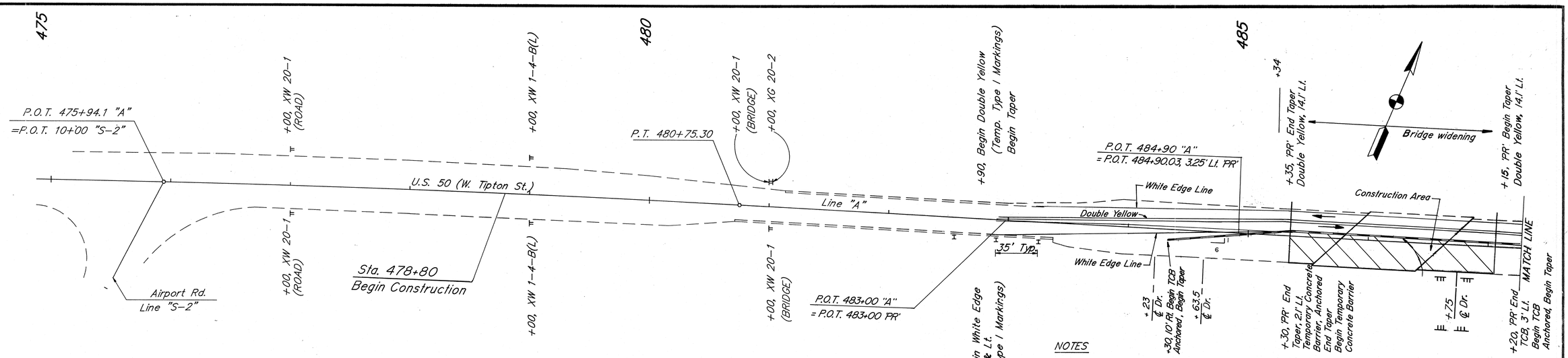
DELMAR L. KLOCKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

DESIGNED C'K'D
DRAWN C'K'D
TRACED C'K'D

SF-22317

1-11-99

TP101



LEGEND

- Drums
- Type III-B Barricode
- Construction Sign

NOTES

1 — Work to be accomplished in this phase includes:
A— Removal of existing rail on South side of bridge
B— Reconstruction of approach slabs with integral curb on the South (Right) side
C — Installing new rail on South side of bridge
D — Placement of bridge overlay on South side of bridge

2 — Temporary Pavement to consist of 990#/Syd. HMA Base C 25 mm. See Road Plans.

3 — Temporary Edge Line Lt. and Rt. shall closely parallel Double Yellow

4 — All properties served by only one drive shall be provided with access at all times. If a property has two or more drives, one drive shall be usable (open) at all times.

5 — Bridge Maintenance of Traffic shall be coordinated with roadway construction. See Special Provisions.

ESTIMATED QUANTITIES

PAY ITEM	UNIT	PHASE I	PHASE II	TOTAL
Maintaining Traffic	LS	——	——	1
Temporary Conc. Barrier	Lft.	370	190	370
Construction Signs, Type 'A'	EACH	14	4	18
Temporary Pavement Markings Type I, 4" White	Lft.	1480	1330	2810
Temporary Pavement Markings Type I, 4" Yellow	Lft.	1400	1330	2770
Removal of Line, Paint, Solid, 4"	Lft.	1310	2680	3990
Temporary Bituminous Pavement	TONS	See Road Plans		
Temporary Concrete Barrier, Anchored	Lft.	310	180	310
Type III-B Barricade	EACH	——	4	4

PHASE II
TRAFFIC MAINTENANCE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION
FOR BRIDGE WIDENING

SCALE:— 1" = 40' * DATE:- 11-30 1998

SENIOR DESIGNER

DESIGNED ____ C'K'D ____
DRAWN ____ C'K'D ____
TRACED ____ C'K'D ____

SF-22317

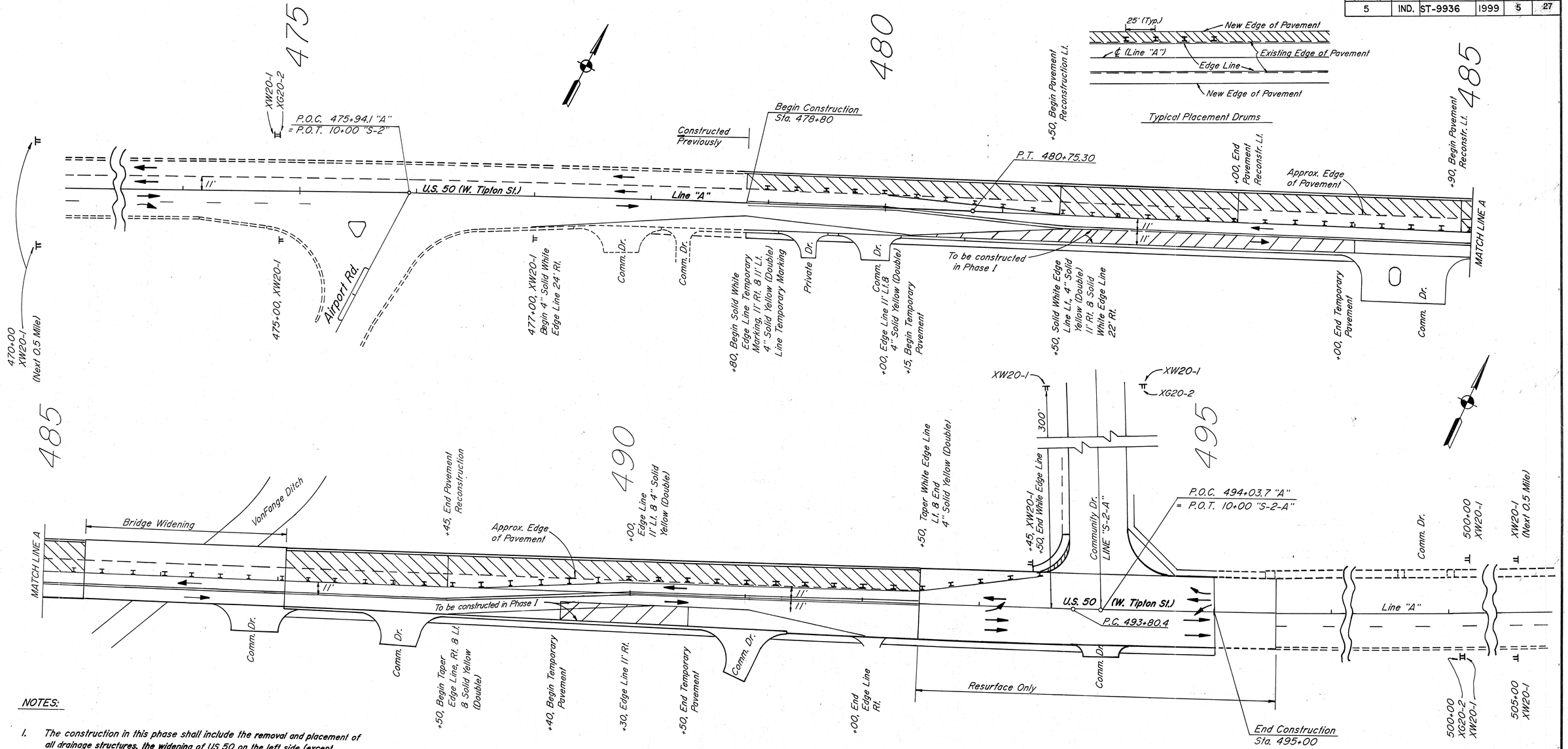
DRAWING:- 2 OF 2 SHEET:- 4 OF 27
PROJECT:- ST-9936( ) STATION:—
BRIDGE CONTRACT NO. R-24065
BRIDGE FILE:- 50-36-6788A

GELMAR L. KLOEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

TP101

1-11-99

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	5	27



NOTES:

1. The construction in this phase shall include the removal and placement of all drainage structures, the widening of US 50 on the left side (except surface course), and the placement of temporary pavement and the placement of temporary markings.
2. It is anticipated that the Contractor will proceed in an assembly line type of construction from East to West. As a portion becomes finished, necessary traffic control devices will be maintained to allow movement to commercial entities, but not allow motorists to utilize the widened pavement.
3. See Sheet 6 for Estimated Quantities for this phase.
4. The widening of the left (north) side of the bridge over VonFange Ditch will be accomplished during this phase. See Special Provisions.
5. Temporary Pavement to consist of 990#/Syd. HMA Base C 25 mm.

LEGEND

- ⊼ Construction Warning Sign
- H Drums
- Pavement Widening or Reconstruction
- Lanes & Direction of Traffic
- Existing Pavement (Approximate)
- New Pavement
- Temporary Pavement

FOR INFORMATION ONLY

ROADWAY
MAINTENANCE OF TRAFFIC
PHASE I

DETAILS

SCALE: 1" = 40'

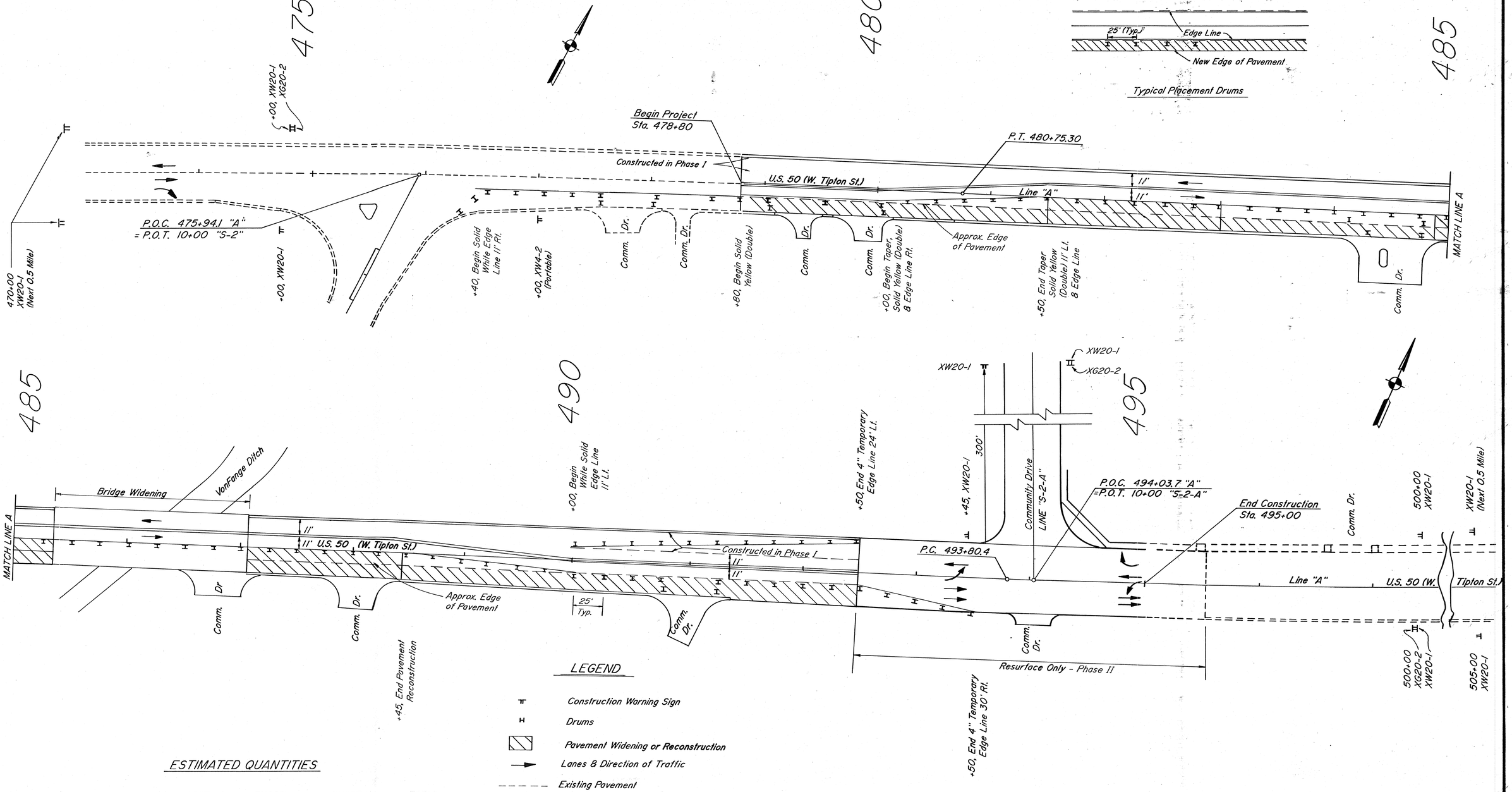
SHEET 1 OF 2

DELMAR L. KLOEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

R-24065

1-11-99

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	6	27



LEGEND

- Construction Warning Sign
- Drums
- Pavement Widening or Reconstruction
- Lanes & Direction of Traffic
- Existing Pavement
- New Pavement

ESTIMATED QUANTITIES

PAY ITEM	UNIT	PHASE I	PHASE II	TOTAL
Maintaining Traffic	LS	—	—	1
Temporary Conc. Barrier	Lft.	See Bridge Plans		
Construction Signs, Type "A"	Each	15	—	15
Temporary Pavement Markings Type I, 4" White	Lft.	2970	1960	4930
Temporary Pavement Markings Type I, 4" Yellow	Lft.	2740	2940	5680
Removal of Line, Paint, Solid, 4"	Lft.	2740	2840	5580
Drums (Not a Pay Item)	Each	87	87	174
Temporary Pavement	Sys.	570	—	570

NOTES:

1. The construction in this phase shall include the widening of US 50 on the right side, the placement of the surface course on the entire roadway width, the placement of pavement markings and traffic signs and the traffic signal loop placement.
2. All properties served by only one drive shall be provided with access at all times. If a property has two or more drives, one drive shall be usable (open) at all times.
3. It is assumed that the widening of the right (south) side of the bridge over VonFange Ditch will be accomplished during this phase.
4. It is anticipated that the Contractor will proceed in an assembly line type of construction from West to East as a section becomes finished, necessary traffic control devices will be maintained to allow movement to commercial entities, but not allow motorists to utilize the widened pavement.

FOR INFORMATION ONLY

ROADWAY
MAINTENANCE OF TRAFFIC
PHASE II

DETAILS

SCALE: 1" = 40'

SHEET 2 OF 2

R. 24065

1-11-99

Rev. Temp. R/W Sta. 485+30 Rt. 11-12-98 & Sta. 484+00 Rt. 11-30-98

Revised Temp. R/W Sta. 487 to 488+50 Rt. 11-10-94

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST 9936( )	1999	7	27

PLAN — SURVEYED / PLOTTED / NOTE BOOK / No. — ALIGNMENT CHECKED / R/W PLOTTED / STRUCTURE NOTATIONS CHECKED — Batsman Engineering P.C. Traffic Engr. Studies 5-90 / Traffic Engr. Studies 5-90

485

CHESSIE R.R.

+21, 77.5'- Tfp.

+63, 27.5'- Begin C.R. End Treatment

+35.5, 32'- Pole (Traffic Sign Structure)

+44, 84.5'- Tfp.

+50.8, 45.5'- MH

+99, 49'; Tel. Mkr.

+13, 15'- Outlet, 6" FBCCS Toe Drain Pipe

Exist. Twin Stone Box Culvert wl 5'x9.3' & 8'x9.3' Openings

+82.5, 93.5'- Tfp.

+21.5, 39'; Tel. Mkr.

+21, 22'- End G.R. End Treatment

+55, 61'; Gas Line Mkr.

+72, 57'; Tel. Mkr.

Apparent ℄ & R/W

Ditch

Van Fange

Existing Rip - Rap

Existing Rip - Rap

6" FBCCS Pipe

STR. NO. 43

No Change Req'd.

24" RCP (Sanitary) +49

18" RCP (Sanitary)

Constr. Limits

Aluminum Guard Rail

PI 484+90.03 "PR" = POT 484+90 "A" 3.25' Lt.

LINE "PR" N 62°- 59'-12" E

LINE "A"

STR. 50-36-6788

(Cont. Reinf. Conc. Slab)

(Sanitary) +34

Gas

(Bit.) (Conc.)

STR. NO. 80

46 Lft. of 15" CS Pipe slotted drain pipe & 26 Lft. of 15" CS Pipe req'd. Connect with STR. NO. 42

18" RCP +81.5

Aluminum Guard Rail

LINE "PR" N 63°-58'-00"

+05 +10

(Conc.) (Bit.)

Rip-Rap

Conc. Retaining Wall & 4' C.L.T.F.

Gas (Inactive)

12" Water

Aluminum Guard Rail

Constr. Limits

+99

+20 R/W

Apparent R/W & ℄

45' Comm. Dr.

(Bit.) (Sanitary)

Remove Bitum. Pvmt.

R/W & ℄

+50 50'(R/W)

+50 60'

+℄ 50

+28

Ex. Conc. Pipe

73.6' Comm. Dr. (Bit.)

+℄ 55'

+℄ 60'

Gas

Constr. Limits

Temp. R/W for Dr. Reconstr.

Temporary R/W for Drive Reconstruction

+℄ 80'

STR. NO. 46

Reconstruct Manhole 2 Lft. Req'd.

(Grass)

+℄ 70'

+95 80'

Temp. R/W for Dr. Reconstr.

18" RCP

Existing Twin 5'x7' Box Culvert

+℄ 80'

+36.5 Apparent ℄

+08, 86'- M.H.

+20.22, 49.8'- Boat Spk. (℄)

SILGAS REALTY CORP.

+82, 39'- Begin G.R.

+92, 62'- Comm. Sign

+00, 32'- M.H.

+31.9, 50.27'- R/W Mkr.

+31.9, Apparent ℄ +35.5, 33'- Pole (Traffic Sign Structure)

+68.52, 60.1'- R/W Mkr.

+04.37, 50.84'- R/W Mkr.

BERNARD C. & EVE L. BRUCE, et ux (Culligan, Inc.)

ROBERT E. & EVELYN LUECKE, et ux (Luecke T.V.)

Sec. 19, T6N, R6E Jackson Twp. Jackson County

+51, 36.5'- Fire Hyd.

+58, 39'- End G.R.

+20, Apparent ℄

+94, 45'- Down Guy

+94.5, 46'- Down Guy

+02, 48'- Tfp.

+03, 45'- Down Guy

+43, 54'- Comm. Sign

+49.5, 38.5'- Gas Line Mkr.

+83, 49.5'- Pole Light

+26, 49'- Pole Light

+30, 51'- Comm. Sign

+38, 39.5'- Down Guy

+54.5, 40'- Tfp.

+70, 40.5'- Down Guy

STR. NO. 81

Reconstruct Structure, Inlet, Modified, 4.23 LFT.

PI 487+50.03 "PR" = POT 487+50 "A" 3.25' Lt.

Aluminum Guard Rail

STR. NO. 42

Inlet Type F-7 & 19 Lft. of 18" Group 'L' Pipe Req'd. Connect with STR. NO. 81

U.S. 50 (W. Tipton St.)

LINE "PR" N 63°-58'-00" E

LINE "PR" N 64°-56'-48" E

STR. NO. 82

Reconstruct Structure, Inlet, Modified, 3.5 LFT.

STR. NO. 48

38 Lft. of 15" CS Pipe slotted drain pipe and 54 Lft. of 15" CS Pipe req'd. Connect with STR. NO. 42

+05 +56

STR. NO. 41

18" Pipe Catch Basin and 9 Lft. of 18" Group 'L' pipe req'd. Connect with STR. NO. 82

+66

Gas (Inactive)

Apparent R/W & ℄

55' R/W

+℄ 55

CONTINENTAL TELEPHONE COMPANY of INDIANA

NOTE:

Elevation of stubs from INDOT Plans dated 8-20-93.

FOR INFORMATION ONLY

"ALL TOPO & R/W ON THIS SHEET DESCRIBED FROM LINE "A" EXCEPT AS SHOWN."

B.M. # 7 PK Nail 1' up in Pwp/Luminaire Sta. 483+71 44' Lt. El. 569.86

B.M. # 8 PK Nail 1' up in Pwp/Luminaire Sta. 489+49 24' Lt. El. 570.12

PROFILE — SURVEYED / PLOTTED / NOTE BOOK / No. — GRADES CHECKED / R/W PLOTTED / STRUCTURE NOTATIONS CHECKED — Batsman Engineering P.C. Traffic Engr. Studies 5-90 / Traffic Engr. Studies 5-90

P.V.I. +09 EL. 571.24 V.C. = 50'

+90, Begin Pavement Reconstruction End Surface Milling

P.V.I. +34 EL. 571.24 Meet Bridge Approach Slab End Pavement Reconstruction

P.V.I. +12.75 EL. 571.24 Meet Bridge Approach Slab Begin Pavement Reconstruction

P.V.I. +50 EL. 571.24 V.C. = 80'

488+45, End Pavement Reconstruction Begin Surface Milling

+0.3436%

Profile Grade

Existing Grade

NOTE: Plotted 10' Above Datum

Ex. Stub INV. 563.03 +10 STR. NO. 42

46x29

INV. 561.55

INV. 565.95

-0.38% 15" Dia. (Slotted Pipe)

2.11% 15" Dia.

INV. 565.70

INV. 565.25

INV. 561.84 +10 STR. NO. 81

INV. 564.26 +28

15" Dia.

INV. 564.16 +28 STR. NO. 42

+5.05%

45x29

+0.30% 15" Dia. (Slotted Pipe)

INV. 567.19 +90

INV. 567.27 +20

Ex. Stub INV. 562.34 +56 STR. NO. 41

INV. 562.32 +56 STR. NO. 82

0.41%

45x29

Proposed Profile Grade

Existing Profile Grade

569.82

Exist. 18" RCP (San.)

INV. 557.93 +49 STR. NO. 43

570.63 | +50, 570.78 | 570.97 | +50, 571.02 | +75.5, 571.07 | 571.02 | +50, 571.16 | 571.00 | +50, 570.71 | 570.40

575 / 570 / 565 / 560

484 | 485 | 486 | 487 | 488 | 489 | 490

-50, Begin Wedge & Level

DELMAR L. KLOEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

R-24065

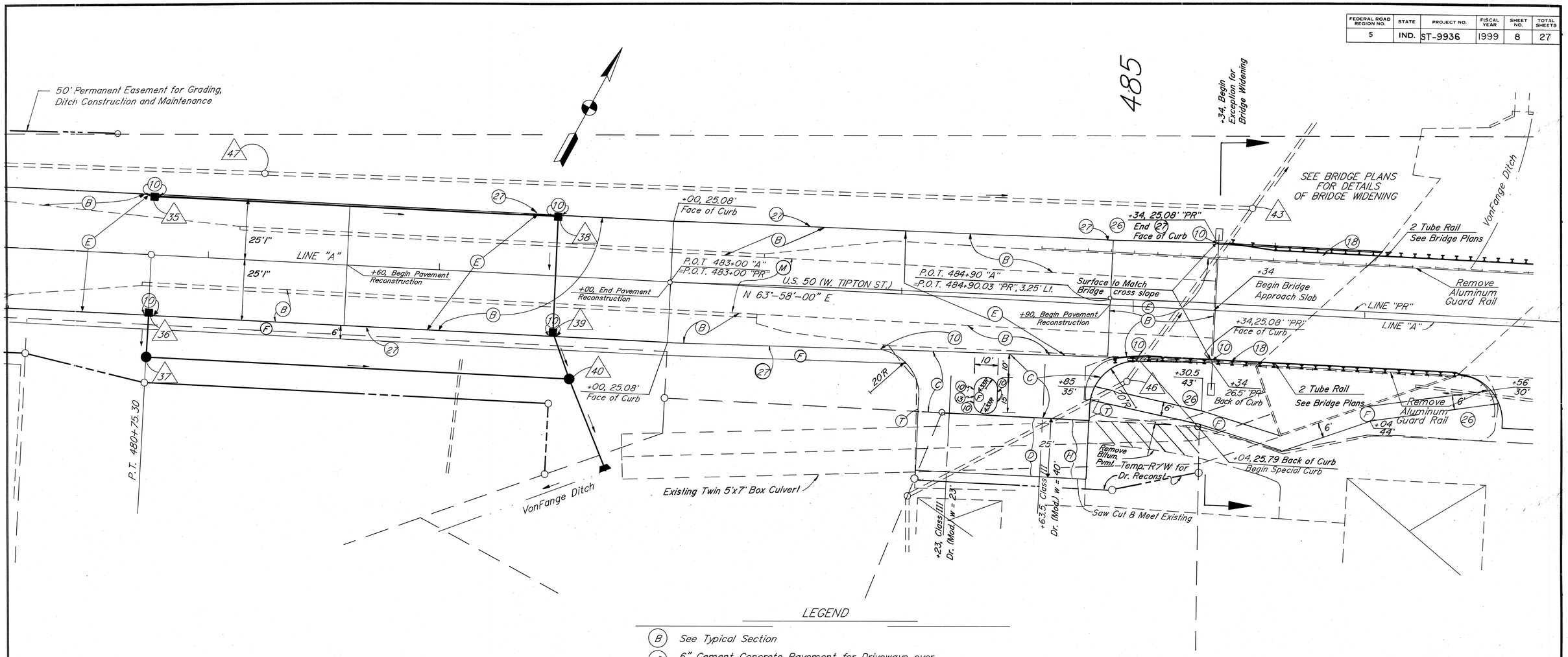
PLATE 3 - PLAN - PROFILE S. R. R. STANDARD 1975

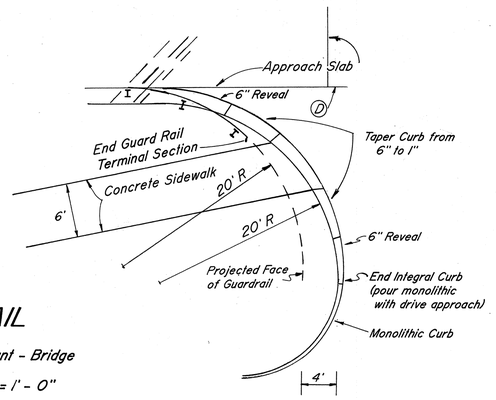
PROJECT NO.	LINE	SHEET NO.	TOTAL SHEETS	FILE
ST 9936( )	A	7	27	

TP116

1-11-99 6

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	8	27





DETAIL

Southeast Quadrant - Bridge

Scale: 1/8" = 1' - 0"

LEGEND

- (B) See Typical Section
- (C) 6" Cement Concrete Pavement for Driveways over 6" Compacted Aggregate Size No. 53.
- (D) 440#/Syd (240 kg/m²) HMA for Approaches
- (E) 137.5#/Syd (75 kg/m²) HMA Surface 9.5 mm, Mainline over 302.5#/Syd (165 kg/m²) HMA Intermediate 19.0 mm, Mainline
- (F) 4" Concrete Sidewalk
- (H) 8" Compacted Aggregate Base
- (T) Curb shall taper at the rate of 1"/ft. from maximum height to 1/2".
- (10) 1/2" Preformed Joint Filler
- (13) Concrete Curb
- (18) R. C. Bridge Approach (See Bridge plans)
- (26) Sod (Nursery)
- (27) Integral Curb (Modified
- △ Denotes STR. NO. (See Plan & Profile Sheet 9)

NOTES:

1 — Bituminous Surface Milling varies from 2" @ Sta. 483+00 to 1" @ Sta. 484+90.

2 — See Bridge Plans for Special Curb Detail.

3 — Curb ramps to be constructed at all drives in accordance with INDOT Standard Details.

FOR INFORMATION ONLY

CONSTRUCTION DETAILS

Scale: 1" = 20'

DELMAR L. KLOEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

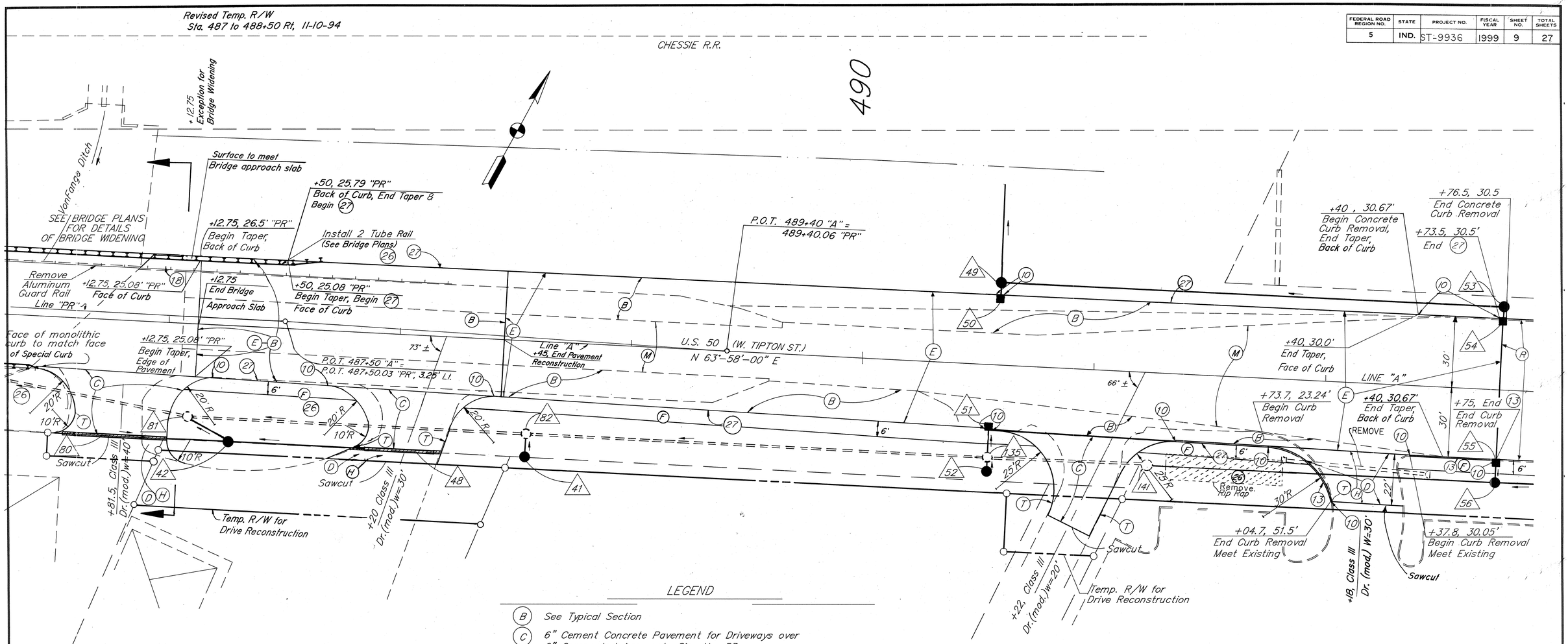
R. 24065

1-11-99

Deleted R/W STA. 491+38 to 493+20 Lt 4-24-98

Revised Temp. R/W
Sta. 487 to 488+50 Rt, 11-10-94

FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	9	27



LEGEND

- (B) See Typical Section
- (C) 6" Cement Concrete Pavement for Driveways over 6" Compacted Aggregate Size No. 53.
- (D) 440#/Syd (240 kg/m²) HMA for Approaches
- (E) 137.5#/Syd (75 kg/m²) HMA Surface 9.5 mm, Mainline over 302.5#/Syd (165 kg/m²) HMA Intermediate 19.0, Mainline
- (F) 4" Concrete Sidewalk
- (H) 8" Compacted Aggregate Base
- (R) 137.5#/Syd (75 kg/m²) HMA Surface 9.5 mm, Mainline
- (T) Curb shall taper at the rate of 1"/ft. from maximum height to 1/2".
- (10) 1/2" Preformed Joint Filler
- (13) Concrete Curb
- (18) R. C. Bridge Approach (See bridge plans)
- (26) Sod (Nursery)
- (27) Integral Concrete Curb (Modified)
- △ Denotes STR. NO. (See Plan & Profile Sheets 10 & 11 for Descriptions)

NOTES:

1 — Bituminous Surface Milling 1" required from Sta. 488+45 to Sta. 495+00.

2 — See Plan and Profile for Wedge & Level Coarse Req'd. (Sta. 489+50 to Sta. 491+75 — 97 T ±)

3 — Transition Bituminous from 3" at Sta. 441+75 to 1 ¼" at Sta. 492+75.

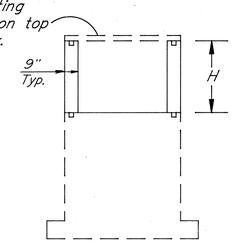
4 — See Bridge Plans for Special Curb Detail.

5 — Curb ramps to be constructed at all drives in accordance with INDOT Standard Details.

RECONSTRUCTED STRUCTURE TABLE AND DETAILS

STR No.	H (ft.)	FRONT/BACK HORIZ LENGTH	FRONT/BACK HORIZ No.	FRONT/BACK VERT LENGTH	FRONT/BACK VERT No.	SIDE HORIZ LENGTH	SIDE HORIZ No.	SIDE VERT LENGTH	SIDE VERT No.	No. 4 Bars LENGTH (lft.)	No. 4 Bars WEIGHT (lbs.)	CONCRETE (cys.)
81	4.23	6.00	18	3.73	26	4.00	18	3.73	18	344.1	230	2.2
82	3.50	6.00	14	3.00	26	4.00	14	3.00	18	272.0	182	1.8
135	2.00	6.00	10	1.50	26	4.00	10	1.50	18	166.0	111	1.1
141	1.00	—	—	—	—	—	—	—	—	—	—	0.5

Contractor shall use existing concrete cap with grate on top of extended concrete box.



NOTES:
1 — Reinforcing steel clearance at edges of concrete shall be a minimum of 3".
2 — Minimum spacing for reinforcing steel to be 6".

FOR INFORMATION ONLY

CONSTRUCTION DETAILS

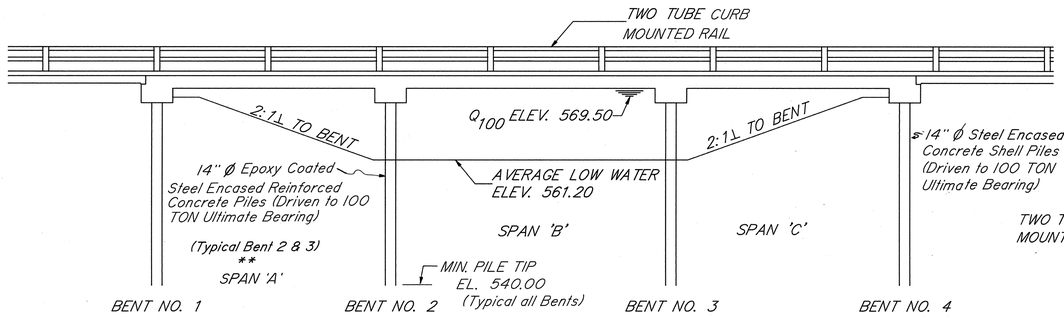
Scale: 1" = 20'

DELMAR L. KLOEKER REGISTERED No. 11844 STATE OF INDIANA PROFESSIONAL ENGINEER

1-11-99

R-24065

EXISTING STRUCTURE IS BUILT ON A 0.00% GRADE

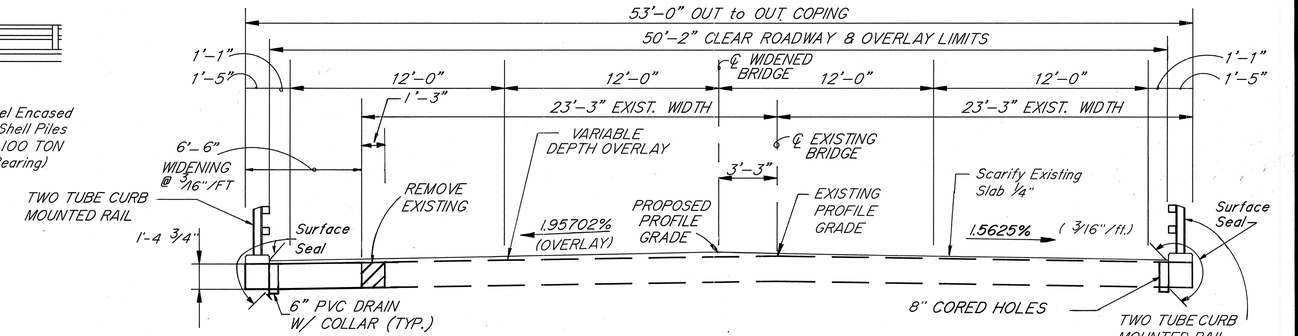


** Lower limit of Epoxy Coating EL. 558.00

ELEVATION

SCALE: 1/8"=1'0"

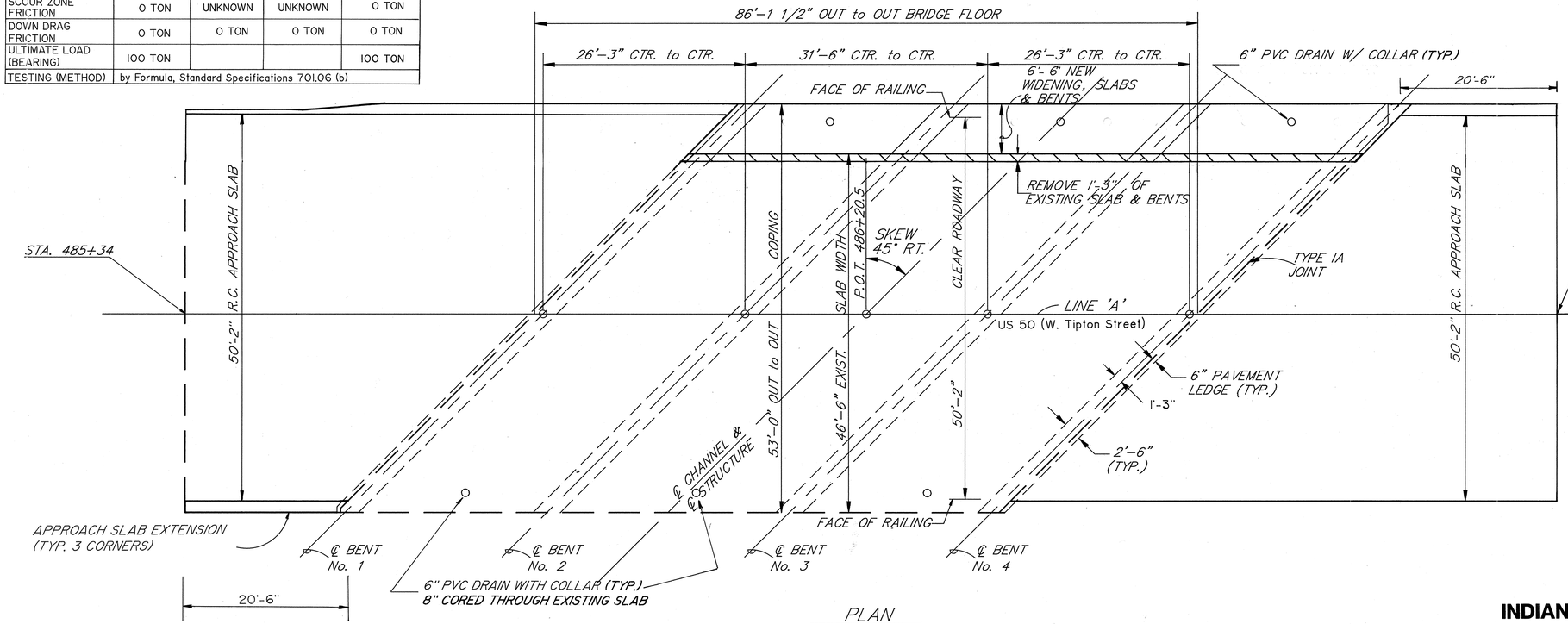
PILE LOADING FOR GEOTECHNICAL TESTING				
BENT	1	2	3	4
ALLOWABLE DESIGN LOAD	40 TON	40 TON	40 TON	40 TON
FACTOR OF SAFETY	2.5	2.5	2.5	2.5
FACTORED DESIGN LOAD	100 TON	100 TON	100 TON	100 TON
SCOUR ZONE FRICTION	0 TON	UNKNOWN	UNKNOWN	0 TON
DOWN DRAG FRICTION	0 TON	0 TON	0 TON	0 TON
ULTIMATE LOAD (BEARING)	100 TON			100 TON
TESTING (METHOD)	by Formula, Standard Specifications 701.06 (b)			



TYPICAL BRIDGE SECTION ⊥ TO CENTERLINE OF STRUCTURE

SCALE: 1/4" = 1'-0"

NOTE: FOR OVERLAY THICKNESSES SEE SHEET 13



PLAN

SCALE: 1/8" = 1'-0"

NOTES:

1. Bridge Identification Marker at Southwest Corner of bridge to be removed and reset.
2. Extend 6" FBCCS pipe to the north as required (24 Lft. ±).

Design Data

Design in Accordance with 1989 AASHTO Specifications

GENERAL PLAN

Bridge Widening & Rail Replacement
Continuous Reinforced Concrete Slab Bridge
Three Spans 26'-3, 31'-6, 26'-3, 45° Skew Rt
with a 50'-2" Clear Roadway over Von Fange Ditch
on US 50 (W. Tipton Street)

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE:- As Shown DATE:- 1-12 1999

D. Eric Brunn SENIOR DESIGNER

DRAWING:- OF SHEET:- 10 OF 27

PROJECT:- ST-9936 STATION:-

BRIDGE CONTRACT NO. R-24065

BRIDGE FILE:- 50-36-6788A

D. ERIC BRUNN REGISTERED No. 870259 STATE OF INDIANA PROFESSIONAL ENGINEER

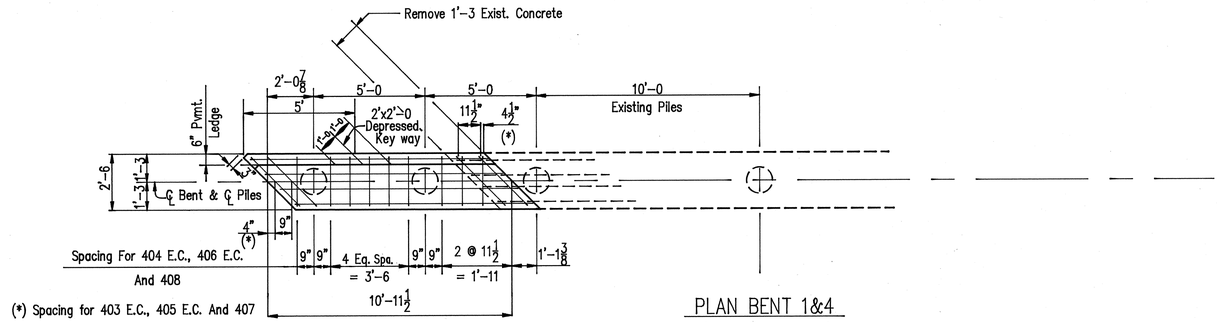
DESIGNED C'K'D
DRAWN C'K'D
TRACED C'K'D

SF-22317

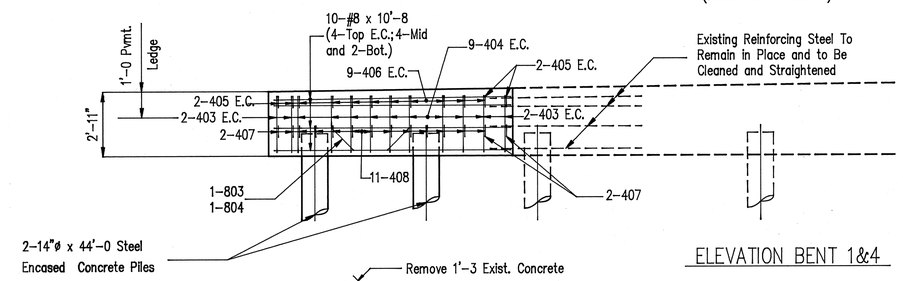
1-11-99

TP101

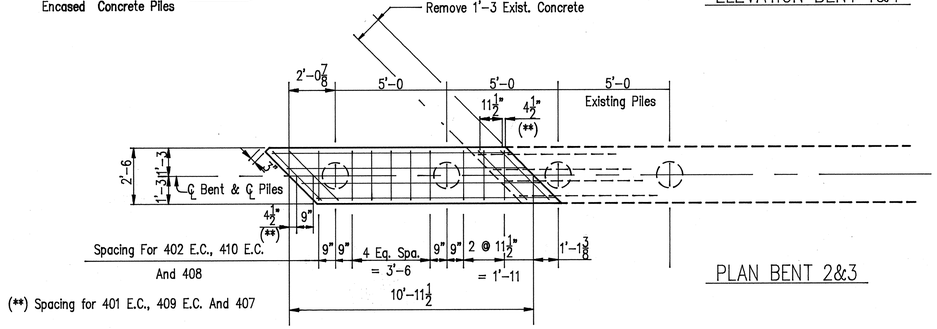
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936	1999	11	27



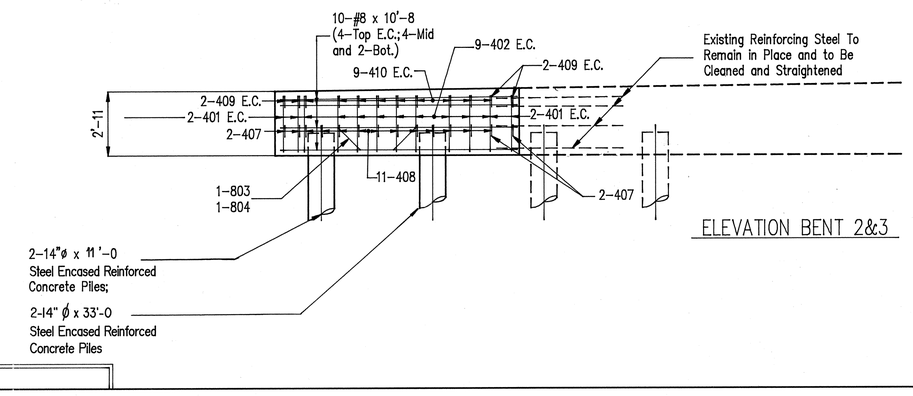
PLAN BENT 1&4
(Bent No. 4 Shown)



ELEVATION BENT 1&4



PLAN BENT 2&3



ELEVATION BENT 2&3

BENTS NO. 1, 2, 3 & 4 BILL OF MATERIALS

Epoxy Coated Reinforcing Steel	Bar or Mark		401 E.C.	402 E.C.	403 E.C.	404 E.C.	405 E.C.	406 E.C.	409 E.C.	410 E.C.		Total #4 E.C. = 475 Lbs.		#8 E.C.		Total #8 = 456 Lbs.	Total E.C. = 931 Lbs.
	No. of Bars		8	18	8	18	8	18	8	18				16			
	Length		9'-0"	8'-0"	8'-2"	7'-2"	6'-0"	5'-2"	6'-10"	5'-10"				10'-8"			
Reinforcing Steel	Bar or Mark		407	408	Total #4 = 138 Lbs.	#8			803	804				Total #8 = 930 Lbs.		Total Reinforcing Steel = 1068 Lbs.	
	No. of Bars		16	44		24			4	4							
	Length		4'-2"	3'-2"		10'-8"			11'-0"	11'-0"							
Steel Encased Reinforced Concrete Piles										44 Lft.	(4-11 ft. piles)						
										308 Lft.	(4-44 ft. piles) (4-33 ft. piles)						
TOTAL 352 Lft.																	

BENTS NO. 1, 2, 3 & 4

DETAIL

Scale: = 3/8" = 1'

R-24065

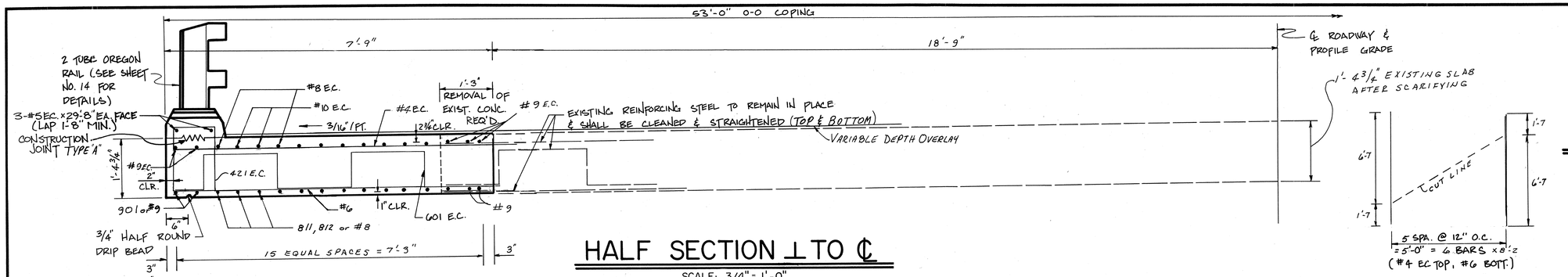
D. Eric Brunn
1-12-99

D. ERIC BRUNN REGISTERED No. 870259 STATE OF INDIANA PROFESSIONAL ENGINEER

DETAIL.DWG Date: 10-7-98
Rev.: 10-30-98
11-23-98
12-14-98

DRAWN BY:

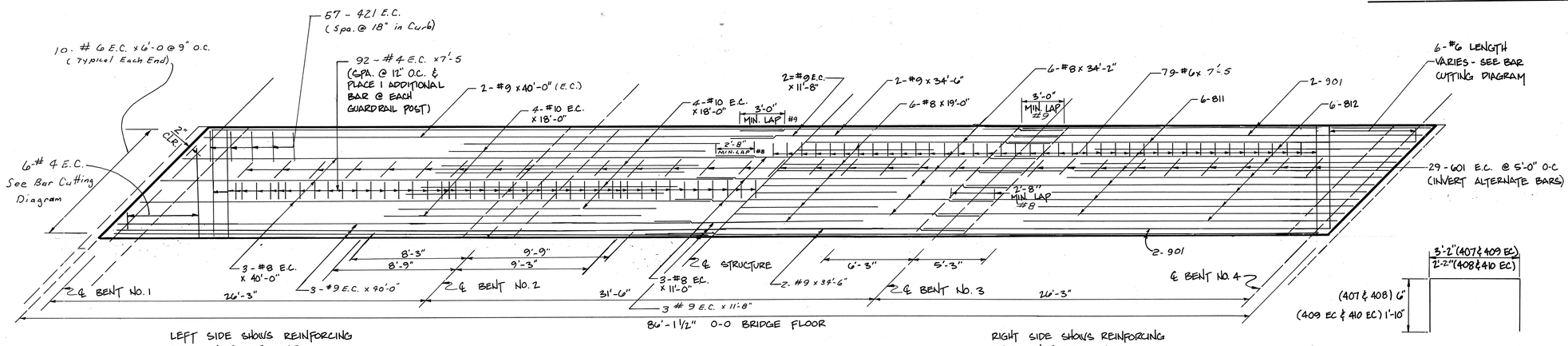
FEDERAL ROAD REGION NO.	STATE	PROJECT NO.	FISCAL YEAR	SHEET NO.	TOTAL SHEETS
5	IND.	ST-9936 (C)	1999	12	27



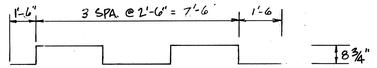
HALF SECTION ⊥ TO ℄

SCALE: 3/4" = 1'-0"

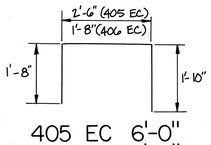
BAR CUTTING DIAGRAM



LEFT SIDE SHOWS REINFORCING STEEL IN TOP OF SLAB.



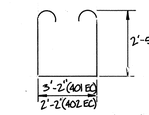
601 EC 13'-5"



405 EC 6'-0"
406 EC 5'-2"

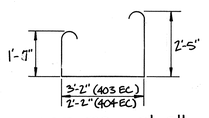
PLAN

SCALE: 1/4" = 1'-0"

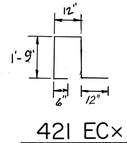


401 EC x 9'-0"
402 EC x 8'-0"

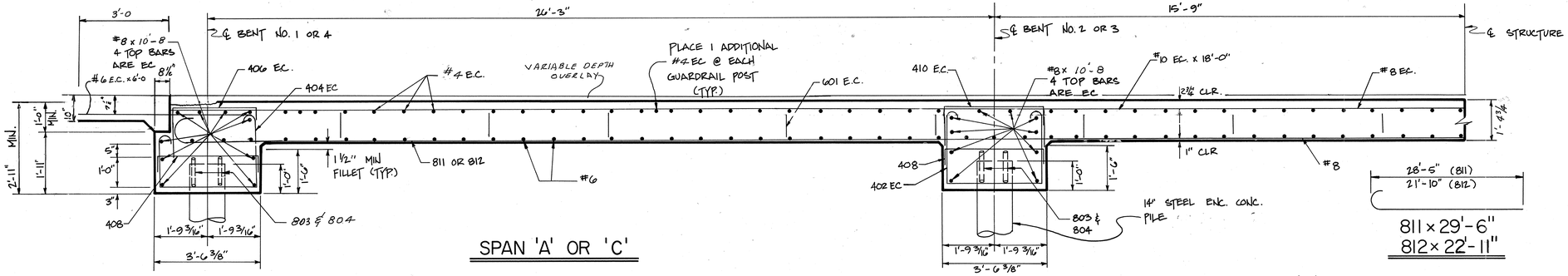
RIGHT SIDE SHOWS REINFORCING STEEL IN BOTTOM OF SLAB.



403 EC x 8'-2"
404 EC x 7'-2"



421 EC x 6'-0"

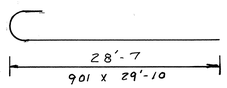


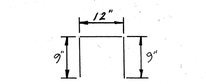
SPAN 'A' OR 'C'

SPAN 'B'

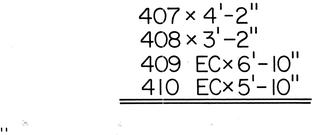
HALF LONGITUDINAL SECTION

SCALE: 1/2" = 1'-0"

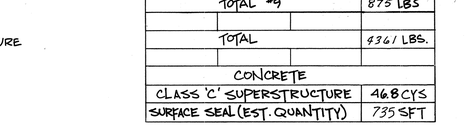




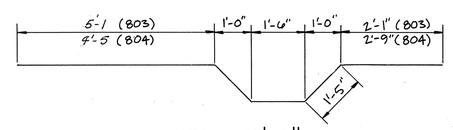
703 EC x 2'-6"
534 EC x 2'-6"



407 x 4'-2"
408 x 3'-2"
409 EC x 6'-10"
410 EC x 5'-10"



811 x 29'-6"
812 x 22'-11"



803 x 11'-6"
804 x 11'-6"

SUPERSTRUCTURE BILL OF MATERIALS

EPOXY COATED REINFORCING STEEL			
BAR OR MARK	NO. OF BARS	LENGTH	WEIGHT
#4 E.C.	92	7'-5"	
421 E.C.	57	6'-0"	
#4 E.C.	6	8'-2"	
TOTAL #4 E.C.			717 LBS.
#6 E.C.	120	3'-8"	
#6 E.C.	20	6'-0"	
#601 E.C.	29	13'-5"	
TOTAL #6 E.C.			1426 LBS.
#8 E.C.	3	40'-0"	
#8 E.C.	3	11'-0"	
TOTAL #8 E.C.			409 LBS.
534 E.C.	69	2'-10"	
#5 E.C.	12	29'-8"	
TOTAL #5 E.C.			576 LBS.
#9 E.C.		40'-0"	
#9 E.C.	5	11'-8"	
TOTAL #9 E.C.			1559 LBS.
703 E.C.	14	2'-10"	
TOTAL #7 E.C.			82 LBS
#10 E.C.	16	18'-0"	
TOTAL #10 E.C.			1240 LBS.
TOTAL EC			6009 LBS.
REINFORCING STEEL			
#6	79	8'-2"	
#6	6	7'-5"	
TOTAL #6			954 LBS.
811	12	29'-6"	
812	12	22'-11"	
#8	6	19'-0"	
#8	6	34'-2"	
TOTAL #8			2532 LBS
901	4	29'-10"	
#9	2	34'-6"	
TOTAL #9			875 LBS
TOTAL			9361 LBS.
CONCRETE			
CLASS 'C' SUPERSTRUCTURE			468 CYS
SURFACE SEAL (EST. QUANTITY)			735 SFT

SUPERSTRUCTURE DETAILS

SCALE: AS NOTED

D. Eric Brown
No. 8[illegible]
STATE OF INDIANA
PROFESSIONAL ENGINEER

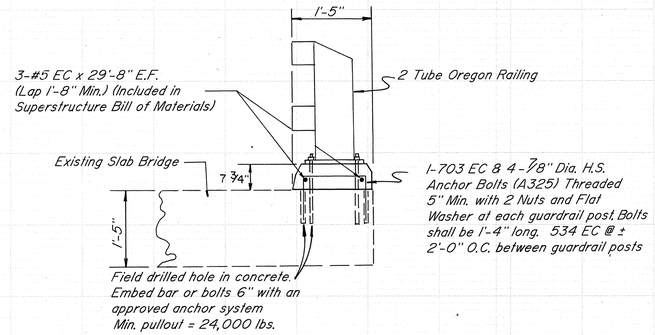
R-24065

1-12-99

11-24-98

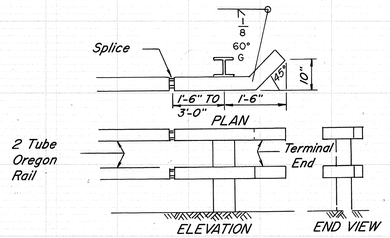
1976

TP107



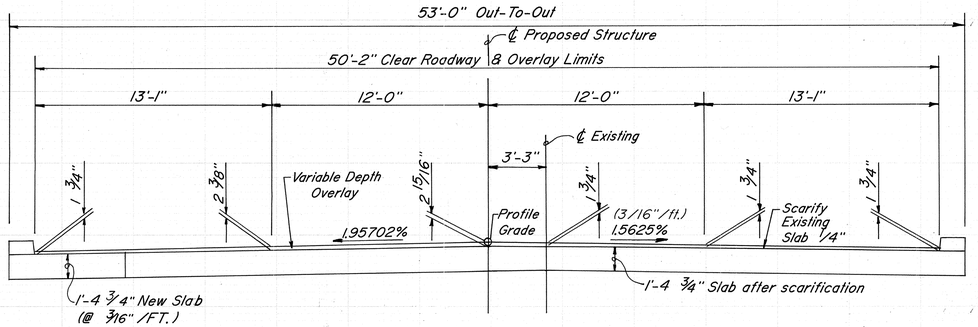
RAILING CONNECTION TO EXISTING BRIDGE

SCALE: 3/4" = 1'-0"



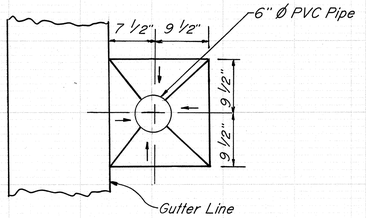
TERMINAL END

NO SCALE



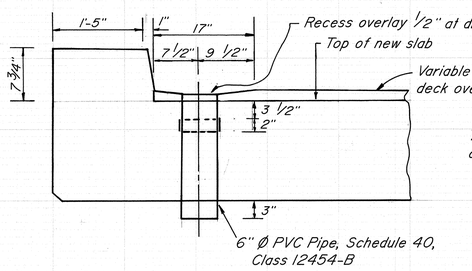
OVERLAY DETAIL

Scale: 1/4" = 1'



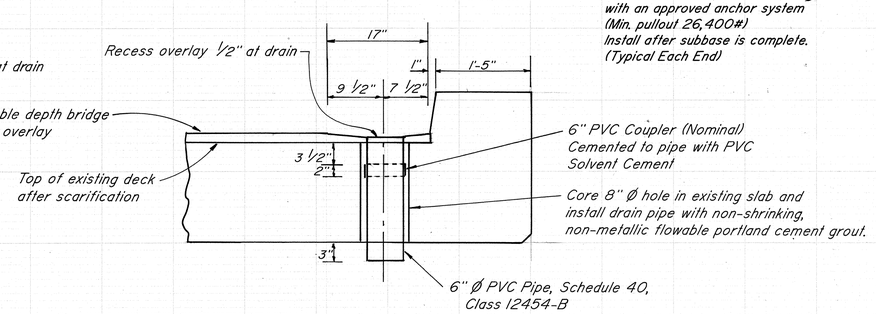
DRAIN PLAN

Scale: 1" = 1'



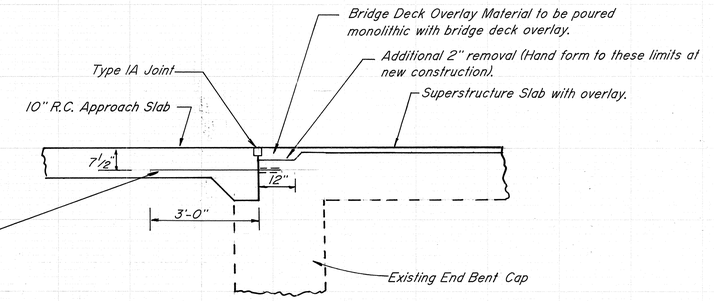
NORTH DRAIN DETAIL

Scale: 1" = 1'



SOUTH DRAIN DETAIL

Scale: 1" = 1'



JOINT DETAIL

Scale: 1/2" = 1'

SUPERSTRUCTURE DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE:— As Shown

DATE:- 1-12 1999

D. Eric Brunn
SENIOR DESIGNER

DRAWING:- OF SHEET:- 13 OF 27

PROJECT:- ST-9936 STATION:—

BRIDGE CONTRACT NO. R-24065

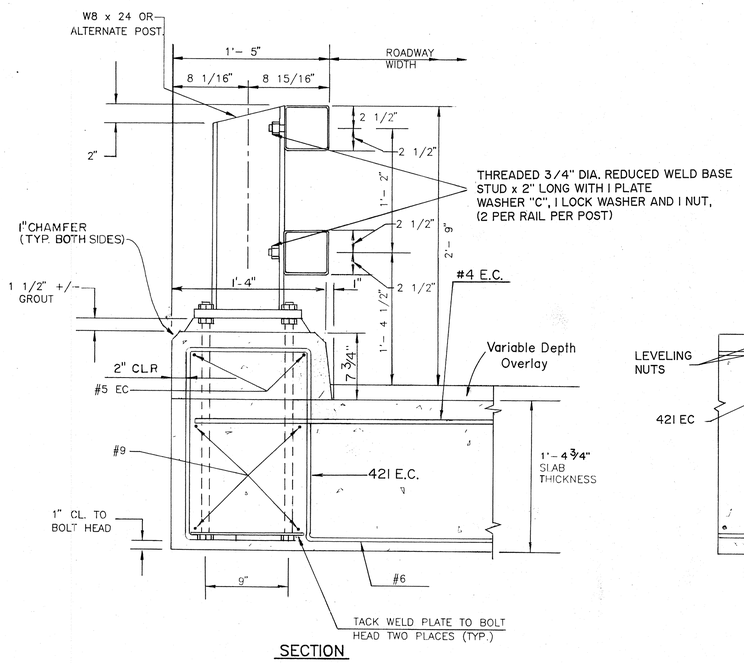
BRIDGE FILE:- 50-36-6788A

D. ERIC BRUNN REGISTERED No. 870259 STATE OF INDIANA PROFESSIONAL ENGINEER

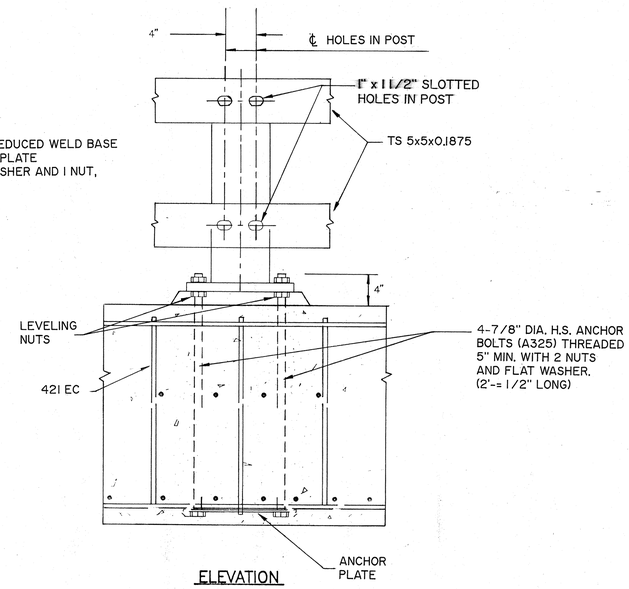
DESIGNED C'K'D
DRAWN C'K'D
TRACED C'K'D

SF-22317

11-2-98



SECTION



ELEVATION

CURB AND POST DETAILS

SCALE: 1 1/2" = 1'-0"

STEEL RAILING FABRICATION NOTES

RAIL ELEMENTS SHALL BE STRUCTURAL TUBING CONFORMING TO ASTM SPECIFICATION A500 GRADE B, A618 OR A501.

STEEL POSTS AND PLATES SHALL CONFORM TO ASTM SPECIFICATION A36 UNLESS OTHERWISE NOTED.

RAILING SHALL BE FABRICATED TO THE HORIZONTAL AND VERTICAL ALIGNMENT OF THE STRUCTURE. POSTS SHALL NORMAL TO GRADE.

ALL STRUCTURAL STEEL INCLUDING FASTENERS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION, EXCEPT AS NOTED. GALVANIZED-CONTROL SILICON MEANS SILICON CONTENT OF 0 TO 0.06% (PREFERABLY 0 TO 0.04%) OR 0.15% TO 0.28% (PREFERABLY 0.15% TO 0.25%).

WHENEVER FIELD FABRICATION, AS APPROVED BY THE ENGINEER, NECESSITATES CUTTING OR DRILLING, THE CUT OR DRILLED MEMBER SHALL BE COATED IN ACCORDANCE WITH SECTION 909 OF THE STANDARD SPECIFICATIONS.

BOLTS TO BE TIGHTENED AS SET OUT IN THE STANDARD SPECIFICATIONS.

THE BRIDGE RAIL END TREATMENT INSTALLATION WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR EACH "BRIDGE RAIL END TREATMENT" AS SHOWN IN THE PLANS, COMPLETE, IN PLACE AND ACCEPTED.

ALL POSTS TO BE W8x24 OR ALTERNATE POST UNLESS NOTED OTHERWISE.

SPLICE TO BE INCLUDED IN UNIT COST OF "BRIDGE RAIL END TREATMENT".

SPLICE TO BE WELDED TO BARRIER RAIL END TREATMENT SIDE ONLY.

NOTE: POSITION WASHER TO COMPLETELY COVER SLOTTED HOLE.

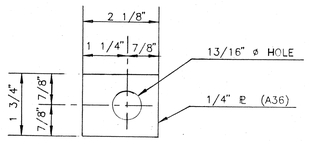
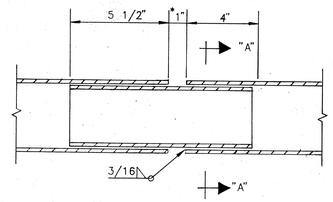


PLATE WASHER - "C"

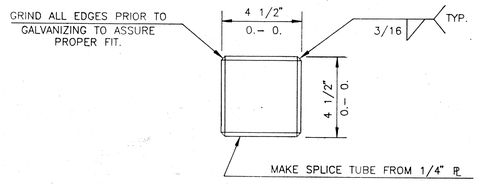
NO SCALE

* 1" GAP UNLESS NOTED OTHERWISE ON DETAIL PLANS. RAIL SPLICE WILL BE NEEDED IN PANEL THAT HAS A DECK EXPANSION JOINT.



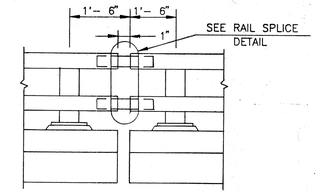
RAIL SPLICE DETAILS

SCALE: 3"=1'-0"



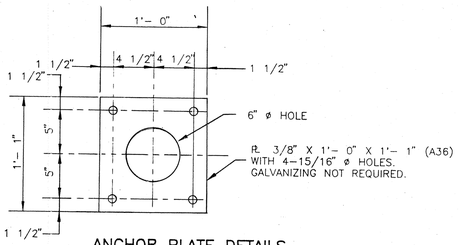
SECTION "A - A"

NO SCALE



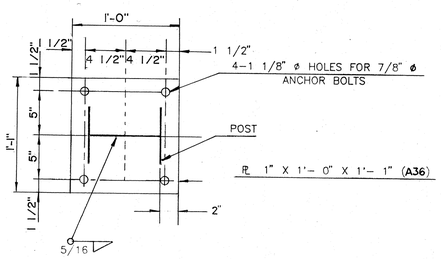
RAIL SPLICE AT BENT NO. 1 & 4

NO SCALE



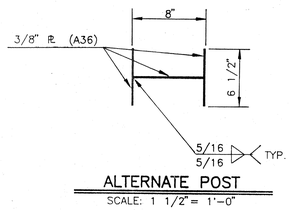
ANCHOR PLATE DETAILS

SCALE: 1 1/2" = 1'- 0"



BASE PLATE DETAILS

SCALE 1 1/2" = 1'- 0"



ALTERNATE POST

SCALE: 1 1/2"= 1'-0"

BRIDGE RAIL DETAILS

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: AS NOTED

DATE:- 1-12-99

D. Eric Bruns
SENIOR DESIGNER

DESIGNED_____ CK'D _____
DRAWN_____ CK'D _____
TRACED_____ CK'D _____

DRAWING - OF SHEET:- 14 OF 27

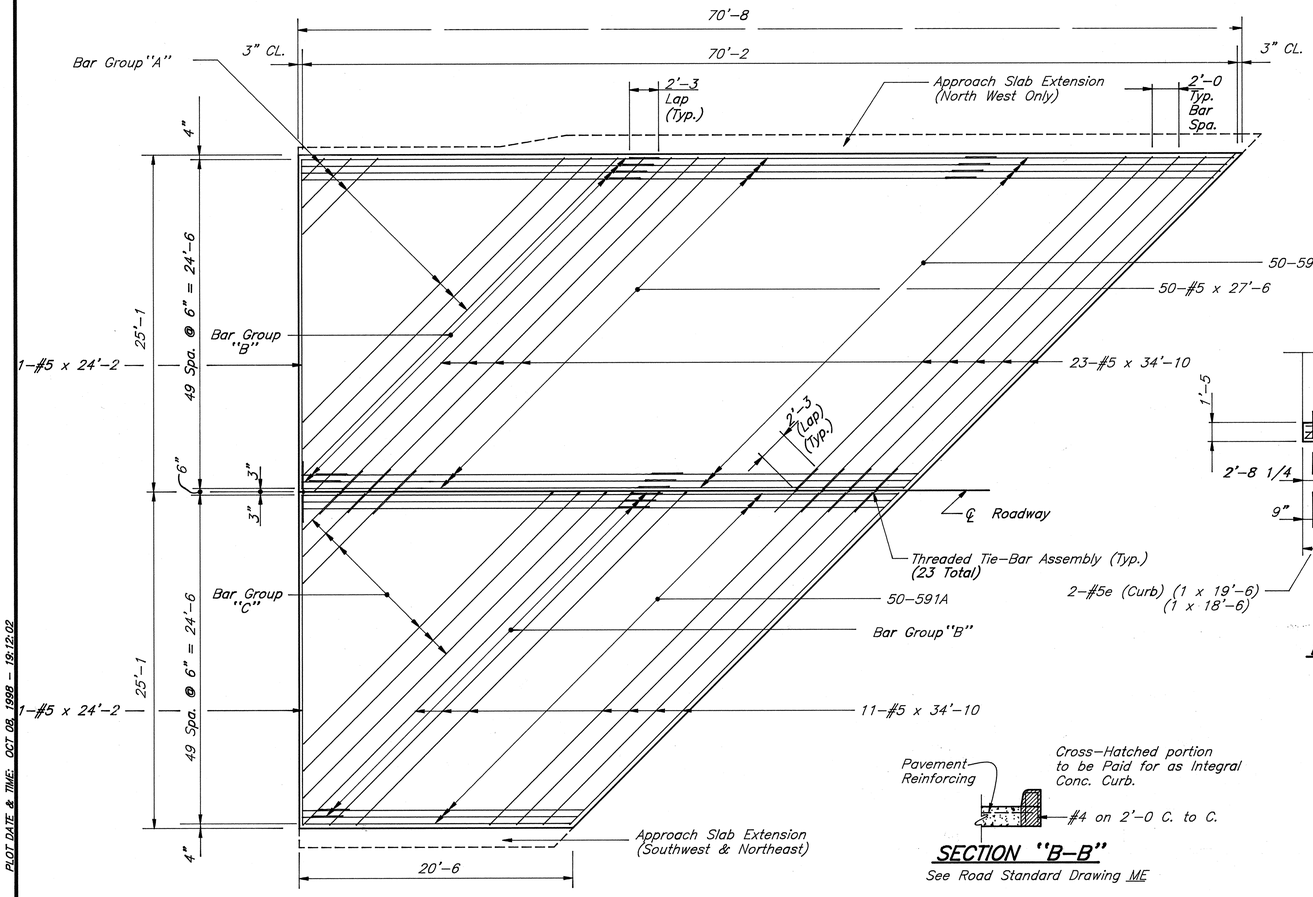
PROJECT: ST-9936(C)

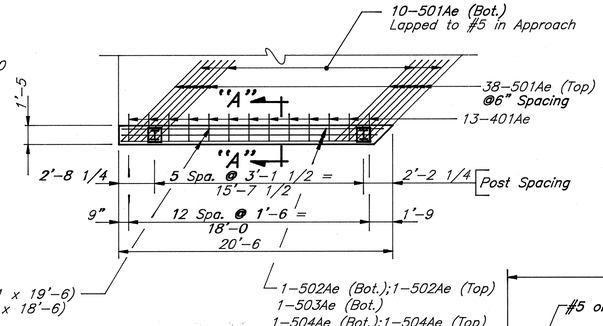
BRIDGE CONTRACT NO: R-24065

BRIDGE FILE: 50-36-6788A

D. ERIC BRUNS — REGISTERED — No. 870290 — STATE OF INDIANA — PROFESSIONAL ENGINEER

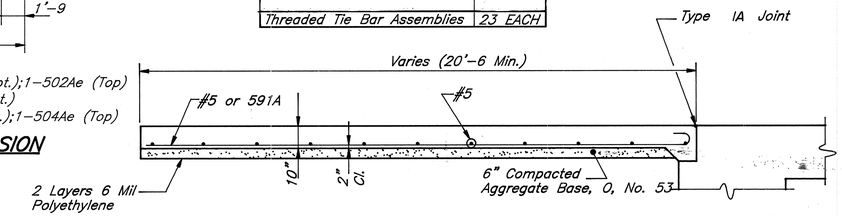
11-2-98



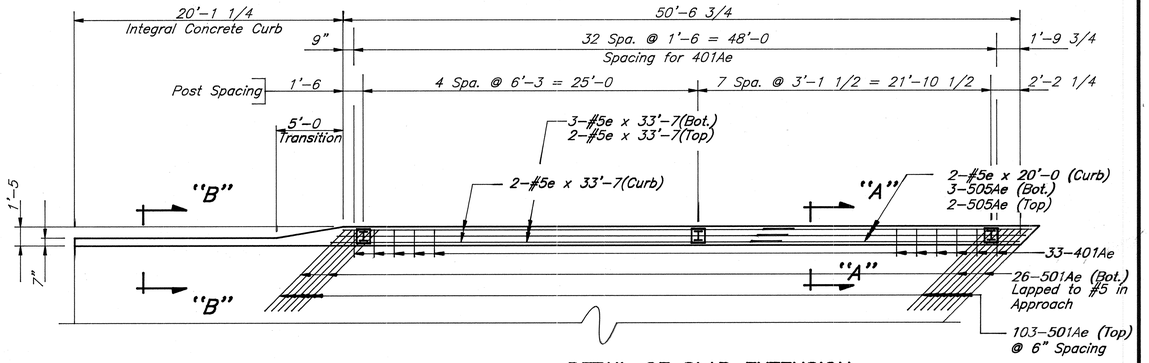


DETAIL OF SLAB EXTENSION

Scale: 3/16"=1'-0

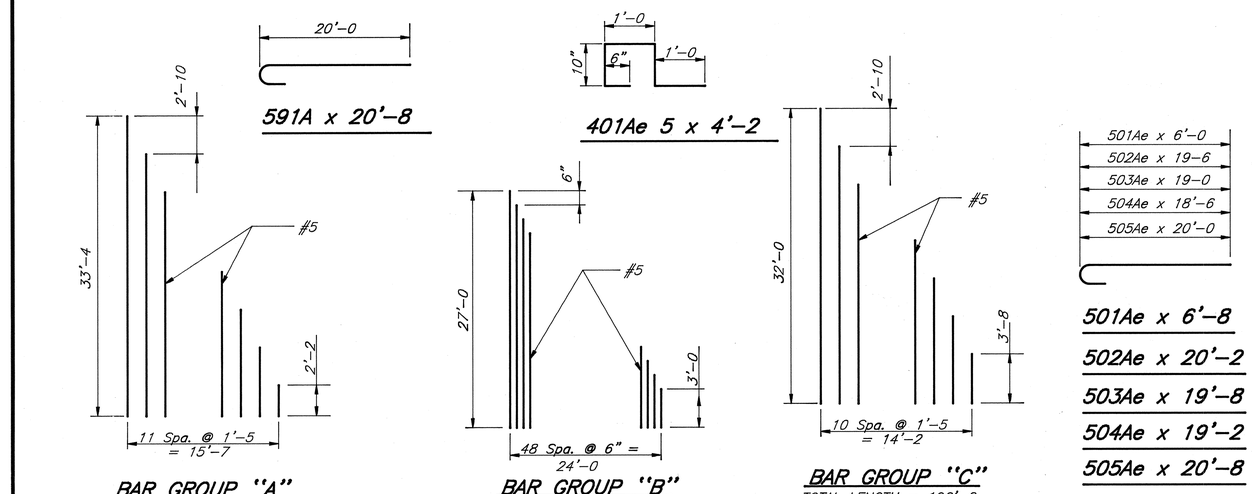


LONGITUDINAL SECTION THRU APPROACH SLAB



DETAIL OF SLAB EXTENSION

Scale: 3/16"=1'-0



SECTION "B-B"

See Road Standard Drawing ME

BAR GROUP "A"

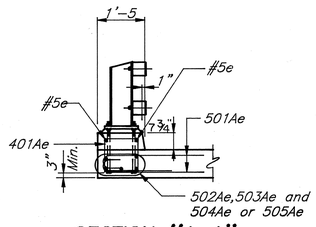
TOTAL LENGTH = 213'-0

BAR GROUP "B"

TOTAL LENGTH = 735'-0

BAR GROUP "C"

TOTAL LENGTH = 196'-2



SECTION "A-A"

Scale: 1/2"=1'-0

WEST APPROACH SLAB BILL of MATERIALS

SIZE or MK	NO. of BARS	LENGTH	WEIGHT
591A	100	20'-8	
#5	1	Bar Group "A"	
#5	2	Bar Group "B"	
#5	1	Bar Group "C"	
#5	34	34'-10	
#5	50	27'-5	
#5	2	24'-2	
Total Uncoated Reinf.			6831#
501Ae	177	6'-8	
502Ae	1	20'-2	
503Ae	1	19'-8	
504Ae	1	19'-3	
505Ae	5	20'-8	
#5e	7	33'-7	
#5e	2	20'-0	
#5e	1	19'-6	
#5e	1	18'-7	
Total #5e			1727#
401Ae	46	4'-2	
Total #4e			128#
Total Coated Reinf.			1855#
MISCELLANEOUS			
Cement Concrete Pavement, Reinf., 10"			254.1SYS.
Approach Slab Extension			11.2 SYS.
Total Concrete			265.3SYS.
Compacted Aggregate,Base Type "O", #53			88.4TON
Threaded Tie Bar Assemblies			23 EACH

EAST APPROACH SLAB BILL of MATERIALS

SIZE or MK	NO. of BARS	LENGTH	WEIGHT
591A	100	20'-8	
#5	1	Bar Group "A"	
#5	2	Bar Group "B"	
#5	1	Bar Group "C"	
#5	34	34'-10	
#5	50	27'-5	
#5	2	24'-2	
Total Uncoated Reinf.			6831#
501Ae	48	6'-8	
502Ae	2	20'-2	
503Ae	1	19'-8	
504Ae	2	19'-3	
#5e	1	19'-6	
#5e	1	18'-7	
Total #5e			476#
401Ae	13	4'-2	
Total #4e			36#
Total Coated Reinf.			512#
MISCELLANEOUS			
Cement Concrete Pavement, Reinf., 10"			254.1SYS.
Approach Slab Extension			3.1SYS
Total Concrete			257.2SYS
Compacted Aggregate,Base Type "O", #53			85.7TON
Threaded Tie Bar Assemblies			23 EACH

APPROACH SLAB
INDIANA DEPARTMENT OF TRANSPORTATION

SCALE: 3/16"=1'-0

DATE: 1-12 1999

D. Eric Brunn
SENIOR DESIGNER

DRAWING: OF SHEET: 15 OF 27

PROJECT:

BRIDGE CONTRACT NO. R.24065

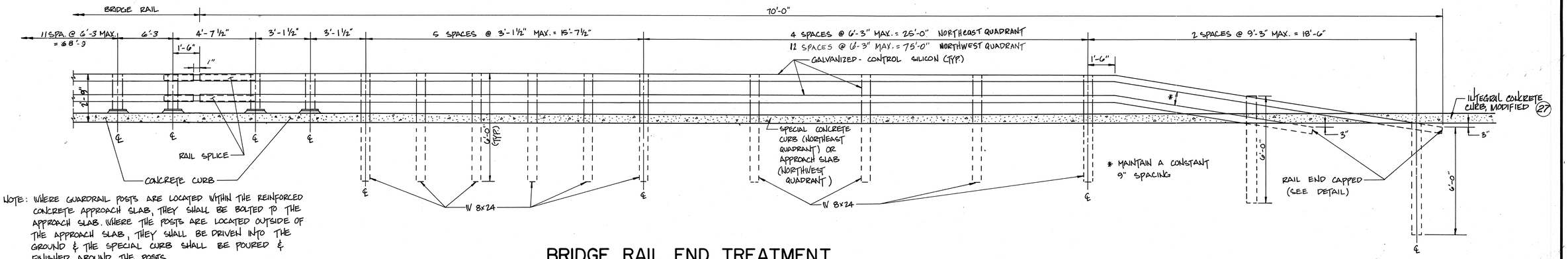
BRIDGE FILE: 50-36-6788A

D. ERIC BRUNN REGISTERED No. 870259 STATE OF INDIANA PROFESSIONAL ENGINEER

US50APP1/64

DESIGNED: CHECKED:
DRAWN: JKW 9/98 CHECKED:
REVISED: CHECKED:

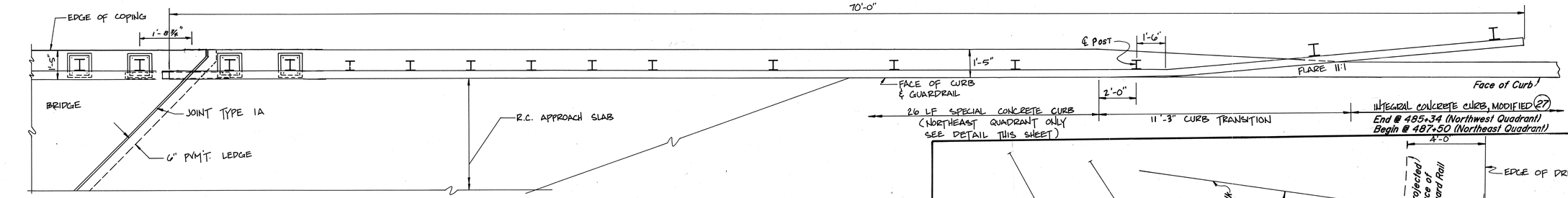
PLOT DATE & TIME: OCT 08, 1998 - 19:12:02



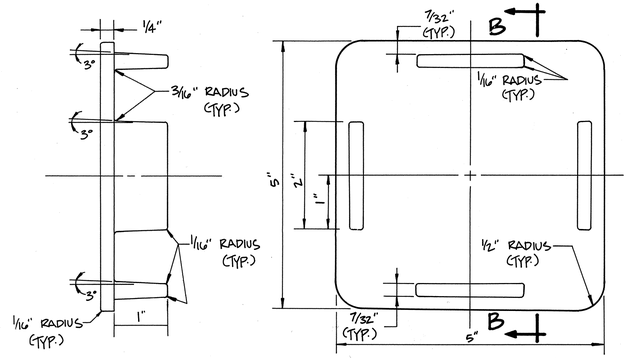
NOTE: WHERE GUARDRAIL POSTS ARE LOCATED WITHIN THE REINFORCED CONCRETE APPROACH SLAB, THEY SHALL BE BOLTED TO THE APPROACH SLAB. WHERE THE POSTS ARE LOCATED OUTSIDE OF THE APPROACH SLAB, THEY SHALL BE DRIVEN INTO THE GROUND & THE SPECIAL CURB SHALL BE POURED & FINISHED AROUND THE POSTS.

BRIDGE RAIL END TREATMENT

ELEVATION VIEW
SCALE: 3/8" = 1'-0"



NORTHWEST AND NORTHEAST QUADRANTS



SECTION B-B

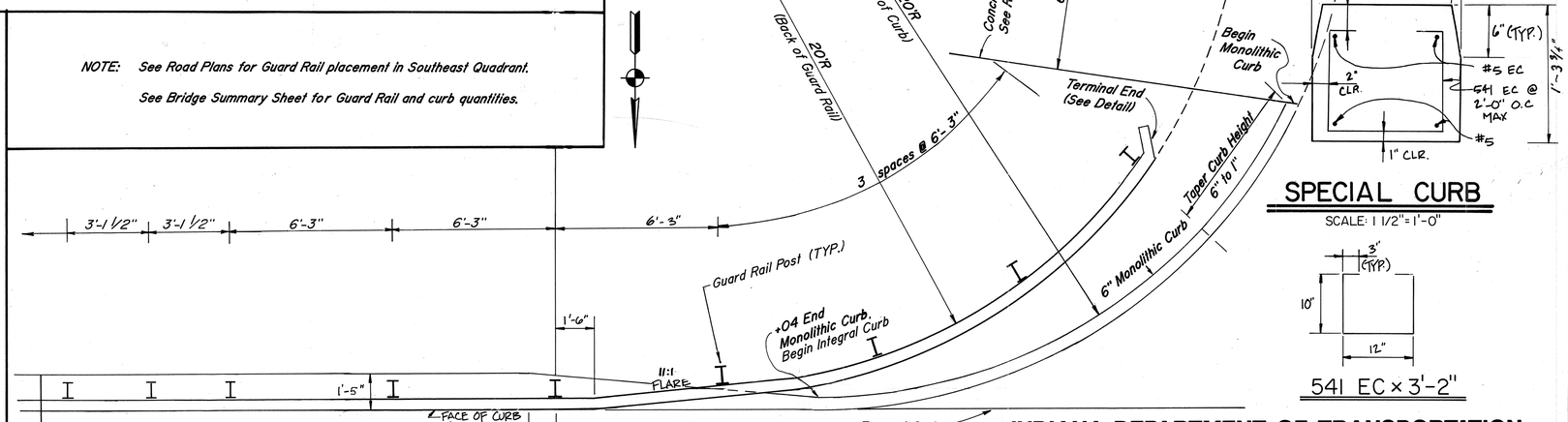
SCALE: 3/4" = 1'-0"

RAIL END CAP

SCALE: 3/4" = 1'-0"

NOTE: See Road Plans for Guard Rail placement in Southeast Quadrant.

See Bridge Summary Sheet for Guard Rail and curb quantities.



SOUTHWEST QUADRANT

BRIDGE RAIL END TREATMENTS

PLAN VIEW
SCALE: 3/8" = 1'-0"

SPECIAL CURB

SCALE: 1 1/2" = 1'-0"

541 EC x 3'-2"

INDIANA DEPARTMENT OF TRANSPORTATION

SCALE:- AS NOTED DATE:- 1-12 1999

D. Eric Brunn
SENIOR DESIGNER

D. ERIC BRUNN REGISTERED No. 870289 STATE OF INDIANA PROFESSIONAL ENGINEER

DRAWING:- OF SHEET:- 16 OF 27

PROJECT:- ST-9936 (C) STATION:-

BRIDGE CONTRACT NO. R-24065

BRIDGE FILE:- 50-36-6788A

DESIGNED	C'K'D
DRAWN	C'K'D
TRACED	C'K'D

SF-22317

12-21-98

12

TP101

STRUCTURE QUANTITIES

ITEM	CONCRETE CLASS C SUPERSTR CU. YDS.	CLASS A SUBSTR CU. YDS.	CLASS B ABOVE FTG. CU. YDS.	CLASS B IN FTG. CU. YDS.			CONCRETE RAILING CLASS C CU. YDS.	CONCRETE RAILING CLASS C LIN. FT.	REINF. STEEL TOTAL LBS.	STRUCT. STEEL *** LBS.	EPOXY COATED REINF. STEEL LBS.	ANCHOR PLATES MK-AP EACH	PILES STEEL ENCASED REINF. CONCRETE NO.	LIN. FT.	NO.	LIN. FT.			STEEL H BEARING NO.	LIN. FT.
SUPERSTRUCTURE	46.8								4361		6009									
BENTS 1, 2, 3 & 4									1068		931		4	44	4	176				
															4	132				
WEST APPROACH SLAB									6831		1855									
EAST APPROACH SLAB									6831		512									
Reinf. Steel for Approach Structures																				
Reinf. Steel for R.C. Bridge Approaches																				
Reinf. Steel for Lip Gutter, Pvmt., Topers, etc.																				
TOTALS	46.8								19,091		9,307		4	44	8	308				

ITEM	CAST IRON DRAIN PIPE LBS.	CAST IRON, GRATES, BASINS, & FITTINGS LBS.	BRIDGE RAILING CURB MOUNT 2 TUBE LIN. FT.	EXP. JOINT TYPE LIN. FT.	EXP. JOINT CLASS LIN. FT.	CONC. STR. MEMBERS BOX BEAMS TYPE SQ. FT.	CONC. STR. MEMBERS I BEAM TYPE LIN. FT.	CEMENT CONC. PVMT. REINF. 10" SQ. YD.	COMP. AGG. BASE TYPE "O" #53 TON	INTEGRAL CONCRETE CURB LIN. FT.	FIELD DRILLED HOLE IN CONCRETE EACH	THREADED TIE BAR ASSEMBLIES EACH	SURFACE SEAL SQ. FT.	BRIDGE DECK OVERLAY SQ. YD.	BRIDGE DECK OVERLAY ADDITIONAL CU. YD.	BRIDGE DECK PATCHING PARTIAL DEPTH SQ. FT.	SURFACE MILLING SQ. YD.
SUPERSTRUCTURE											286		735	480.1	5.9	75.5	419.5
BENTS 1, 2, 3 & 4																	
WEST APPROACH SLAB								265.3	88.4			23					
EAST APPROACH SLAB								257.2	85.7			23					
TOTALS								522.5	174.1		286	46	735	480.1	5.9	75.5	419.5

APPROACH STRUCTURES

STRUCT. NO.	LOCATION	DESCRIPTION SIZE	KIND	LENGTH LIN. FT.	CONCR. CL. A IN STRS. CU. YDS.	REINF. STEEL LBS.	PIPE END SEC. EACH		REMARKS
	See Road Plans								
				TOTALS					Total of Reinforcing Steel Carried to "Structure Quantities"

APPROACH TABLE

LOCATION LT/RT	STATION	DESCRIPTION	WIDTH FT.	RADII FT.	GRADE %	LENGTH FT.	DIST. BEYOND R/W FT.	EXCAVATION (CYS) CUT	FILL	BITUM. SURFACE #/SQ.YD.	TONS	BITUM. BINDER #/SQ.YD.	TONS	BITUM. BASE #/SQ.YD.	TONS	COMP. AGG. BASE Depth (In)	TONS
		See Road Plans															

BRIDGE (GUARD) RAIL & INTEGRAL (SPECIAL) CURB SUMMARY

LT. OR RT.	STATION TO STATION	INTEGRAL Length	INTEGRAL CYS	SPECIAL Length	SPECIAL CYS	APPROACH SLAB Length	APPROACH SLAB CYS	TOTAL CYS	GUARD RAIL (LFT) POST SPACING 3'-1 1/2"	4'-7 1/2"	6'-3"	SHOP CURVED	ON (2) BRIDGE	EACH BURIED END
RT.	485+04 to Bridge Deck	11'	0.33	19'	1.31	20'-6"	0.62		21'-10 1/2"	4'-7 1/2"	25'-0"	18'-9"	South	
	Southwest Quadrant	Width	Varies			Height	Varies						Side	
													84'-3"	
LT.	485+34 to Bridge Deck	15'	0.21	—	—	55'	1.58		21'-10 1/2"	—	75'-0"	—	North	1
	Northwest Quadrant					Height & Width Varies							Side	
													84'-3"	
RT.	Southeast Quadrant	31'-5"	0.64	—	—	—	—		—	—	—	12'-6"		
	(1)	Width	Varies											
LT.	Bridge Deck to 487+50	11'-3"	0.38	26'	1.79	20'-6"	0.62		21'-10 1/2"	4'-7 1/2"	25'	—		1
	Northeast Quadrant	Width	Varies											
	TOTAL CLASS A CONCRETE		1.56		3.10		2.82	7.48	65'-7 1/2"	9'-3"	125'-0"	31'-3"	168'-6"	2

(1) Pour monolithic with drive pavement

(2) Bridge Railing, Curb Mount, 2 Tube

REVISIONS

DATE	ITEM

NOTES:
Weight of Spirals includes weight of 1 1/2 extra turns top and bottom.
Spacers and 1 1/2 turns at laps included in cost of Spiral.
*** The weight of structural steel is approximate only, and it shall be the Contractor's responsibility to determine the weight on which he bases his bid.
For Test Bar Samples See Bridge Standard C1.

JUNE 1984

SUMMARIZED______ C'K'D______
TRACED______ C'K'D______

SF-22332

BRIDGE SUMMARY

DATE 1-12-99

D. Eric Brunn
SENIOR DESIGNER

SHEET 17 OF 27

D. ERIC BRUNN REGISTERED No. 870259 STATE OF INDIANA PROFESSIONAL ENGINEER

PROJECT: ST-042-8 (C)
CONTRACT NO: R-24065
BRIDGE FILE: 50-36-6788A

TP103

1-5-99